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ABSTRACT

Analyzing data from the 1982, 1985, and 1992 Surveys of Public Participation in the Arts (SPPA), this study defined arts participation as involvement in a listed activity at least once in 12 months. Respondents were considered crossover participants if they were involved in a single art form in more than one way or if they were involved in more than one art form in any manner listed in the surveys. What constituted crossover and the characteristics of multi-participants as compared to non-participants were also part of this study. Four types of statistical procedures were used. An analysis of relationships among participants in arts activities was made through the use of correlations cluster analyses and factor analyses. Six major findings indicated that: (1) significant crossover was limited to groups of activities that were related in some manner; (2) decisions to cross participate largely involved consideration of similarities among activities; (3) the average multiple arts participant was over 40 years old, female, college educated, earning more than 20 thousand dollars annually, white, and residing in or near urban area; (4) the average age of participants was rising; (5) strong relationships among groupings of activities were based on definable similarities; and (6) the primary explanatory factor in crossover participation was the ability to view the arts on television or video. These themes suggest a strategy that includes use of media outlets (especially television) as the vehicle for involving people in participation of more than one type of art. (MM)

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ED 410 145

PATTERNS OF MULTIPLE ARTS PARTICIPATION

An analysis of 1982, 1985 and 1992 SPPA Data

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EXECUTIVE SUMMARY

This monograph analyzes data from the 1982, 1985 and 1992 Surveys of Public Participation in the Arts (SPPA). Our analysis focuses on understanding the many dimensions of crossover participation in the arts. This approach consists of examining the magnitude and character of crossover participation, as well as demographic analyses of those who are multiparticipants.

In our analysis of SPPA data, arts participation is defined as involvement in a listed activity at least once in the past 12 months. Crossover participation is defined in two ways. First, a respondent may be considered a crossover participant if they are involved in a single artform in more than one way. Second, a respondent may be considered a crossover participant if they are involved in more than one artform in any manner listed in the surveys. As we argue in the monograph, crossover participation is only understandable in terms of the specific disciplines and venues were it occurs. There is very little crossover participation across discipline and venues that are not in some manner related. What constitutes crossover, and the characteristics of multiparticipants as compared to non-participants is also part of this study.

There are four types of statistical procedures used in this monograph. The magnitude of crossover participation, as well as the characteristics of multiparticipants, are measured through crosstabulations of data. Our analyses of relationships among participation in arts activities are conducted through the use of extensive correlations, cluster analyses and factor analyses.

Selected Findings

Participation in More than One Activity. If we measure crossover arts participation as involvement in more than one arts activity, then crossover participation rates are generally lower than single participation rates for many activities. Overall, between 2 percent and 48 percent of arts participants across all survey years engage in any two of the core survey activities.

Correlations Among Core Variables. Correlation coefficients indicate many variables where participation in one activity could be considered as a predictor of participation in others. Across the ten years of the surveys, strongest (.4000 +) correlations occur:

- Among all jazz variables. Participation in one jazz activity can be considered a substantial indicator of participation in others. Across all three surveys, every jazz variable correlates strongly with all other jazz

variables. Attendance at live jazz concerts is the only live attendance variable that appears among any of the strongly correlated variables.

- Viewers of all listed artforms except ballet and jazz. Individuals who watch any of the artforms listed, except ballet and jazz, are high related.

- Classical music through media venues. Individuals who participate in classical music thorough recordings, television or radio are highly correlated. Correlations of those who participate in live classical music with those who participate in classical music through various media are not as strong.

- Among participation through radio and recordings. For those activities that can be listened to, individuals who participate through radio broadcast are also likely to enjoy the same artforms through recordings.

- Across some disciplines through recordings. Individuals who listen to recordings of opera are also likely to listen to recorded classical music and musicals.

- Generally a strong to very strong correlation of all performing artforms except jazz and ballet. Non-live participation in classical music, dance, opera, musicals, and non-musical plays correlate strongly. Live participation in most of these artforms are not highly correlated. In fact, only attendance at live plays, live musicals and live classical concerts are substantially associated.

- In 1992, reading novels and reading books are very highly correlated, while a substantial to strong correlation occurs among those activities that concern active visits - visits to art fairs, parks and art museums are strongly related.

The lack of live attendance variables correlated strongly with either other live variables or media variables reflects the lower participation rates for live activities as compared to participation through various media.

It is also interesting that none of the variables concerning ballet correlated highly with any other variable. Although ballet has a general participation rate higher than activities such as opera, it is probably the case that since ballet and other dance cannot be enjoyed through media except on television, fewer opportunities for participation result in fewer correlations with other artforms.

Demographic Differences Among Multi-Participants and Non-Participants. Among all the types of crossover participation listed in the correlations above, and across all three survey years, participants are overwhelmingly white, female, college educated, have yearly incomes over twenty thousand dollars and live in or near metropolitan areas.

Among multiparticipants, there is noticeable "age creep." The median age of multiparticipants in 1982 was 44 years. By 1992, multiparticipant median age had increased to 47 years.

Demographic characteristics of non-participants are in some ways exactly opposite of those of multiparticipants. Non-participants are overwhelmingly white, male, have only high school educations or less, have household incomes of less than twenty thousand dollars, and are as likely to live in rural areas as in or near cities.

Between 1982 and 1992, the percentage of members of minorities involved in crossover participation. Although the average multiparticipant is still likely to be white, increases in minority multiparticipation are a consideration.

Crossover Participation and Frequency of Participation. In the 1992 survey, frequency of participation data exists for some of the activities noted in the above correlations. This data indicates that for these associated activities, the frequency of crossover participation is largely between one and five occurrences. Only among associated jazz activities for which there is frequency data do we find significant crossover participation in frequencies greater than five occurrences.

Clusters of Participation. Cluster analysis of each SPPA survey reveals some groupings of individuals based on their participation rates. Basic findings are:

- In all three years, clusters of participation form around an interest in jazz and participation in the arts through media. In 1982 and 1992, there is also a cluster of activities that seems to be related by a preference for attending and/or visiting arts events. In 1992, the addition of new variables results in the formation of a cluster that can best be described as an interest in some literary activities.

- Devolution among clusters results in these general clusters breaking down into more specific, and more significant, groups of arts activities. This process of devolution normally occurs in consideration of similarities in venue or discipline.

Factor Analysis of MultiParticipants. Factor analysis confirms many of the clusters discussed above, and adds a slightly different perspective on the data. Basic findings are:

- Participation data from core variables in 1982 and 1992 can be summarized by five factors. These factor groupings are labeled (1) "watchers" - those who participate by watching art events; (2) "attenders" - those who attend live events or visit arts institutions; (3) "listeners" - those who participate through radio or recordings and (4) "jazzers" - those who participate in jazz through various media and venues. The five factors formed in 1985 data, and the seven factors formed in 1992, account for 50 percent of variance found in the data.

- The factor of "watchers" is the most significant, accounting for half the variance in the 25 + variables measured.

- In 1985, the only factors similar to 1982 and 1992 are those of "watchers" and "jazzers." Three unique clusters form in 1985. They are: (1) those who participate in opera ("opera"); (2) those who attend/visit arts activities that allow some measure of choice such as art fairs and museums ("choosers"); and (3) those who participate in live or media presentation of arts presented on stage ("stage").

- In 1992, the addition of new variables, caused the formation of a new factor that can best be termed "readers." The most influential variables in this factor are reading books and reading novels. Another new factor formed from the inclusion of new variables in 1992 can best be called "literature" since the factor largely consists of all other literary activities except reading books and novels.

CHAPTER ONE: INTRODUCTION

In the past five years, public and private funding of artists and arts organizations have, after inflation, declined. While most institutions do not depend on private or public contributions in order to keep their doors open, earned income from ticket sales, memberships, and associated sales have also remained flat over the past few years.

Successful arts organizations not only conduct their activities with a combination of public funds, private contributions and earned income. They also investigate how their audiences choose to attend an event or purchase a membership, and what it takes to encourage these attendees to continue to support the organization.

Such investigations are more than just marketing. Audience development efforts will help the arts administrator understand which books should be sold in the gift shop, and which performances are most likely to be pleasing to the majority of attendees. But this type of "selling" of the arts is a secondary effect of audience development efforts. The larger purpose to audience development is to expand audience expectations and understandings of the arts generally by introducing new themes, artforms, events and instructions. This type of audience development may sell more tickets, and it may drive away those who do not wish to expand their thinking about the arts.

As many organizations have found, expanding the expectations and understandings of your audience cannot be achieved by simply presenting new or unusual works. One must first understand what their audience finds attractive about the events they do participate in, and speculate about those arts activities their audience would at least find challenging, if not immediately pleasing.

This monograph presents one type of information that could be useful in efforts to understand, and develop, audiences. We investigate the patterns of participation, and characteristics of individuals, who reported on the 1982, 1985 or 1992 Surveys of Public Participation in the Arts (SPPA) engaging in more than one type of arts participation. These multiparticipants are instructive to audience development efforts because we can assume that their interest in the arts is not restricted to one artform within one venue. Multiparticipants engage in the same artform in many different ways, or they engage in more than one artform in one or many ways. Regardless of their patterns of participation, the study of multiparticipants can reveal demographic characteristics and/or participation trends that can be very instructive to anyone seeking to expand the range of their arts activities or the range of individuals who attend them.

The SPPA Surveys

The 1982, 1985 and 1992 Surveys of Public Participation in the Arts were sponscred by the Research Division at the National Endowment for the Arts and conducted by the U.S. Bureau of the Census. SPPA surveys comprise the most comprehensive assessment of arts participation in the United States.

SPPA survey data is weighted (by age, gender, and race) to be representative of the non-institutionalized, over-18 population for each year surveyed. Each survey contains detailed demographic and attitudinal questions as well as four different kinds of questions about how respondents participate in the arts.

The first type of question asked respondents about their direct experience with several categories of arts activities. The second type measures respondent participation in arts activities through various media. The third type asks about respondent preferences for particular artforms and desire for greater participation. The last type details respondent experiences with art classes, instruction or parental encouragement to experience the arts.

Because our focus in on actual participation in more than one art activity, we will primarily focus on those survey questions that assess actual participation. We will not investigate those that measure desire for more arts. Similarly, because our statistical analyses require sufficient numbers of respondents in order to be valid, we will not investigate those questions that measure active respondent participation in creating or performing the arts.

In the 1982 and 1985 surveys, most questions asked respondents to indicate participation in the arts by answering if they had participated during the last twelve months, and further refining their answers by indicating among a range of possible occasions of participation during the last month. In the 1992 survey, respondents were asked to indicated participation and were allowed to further elaborate by listing the number of occasions they participated during the last year. For the sake of simplicity, in this monograph, participation in the arts means that respondents have participated in the activity in question during the past twelve months. This means that within our analysis, there is no difference between persons who attended an event once and those who attended on 15 occasions. However, because frequency of participation data can indicate the "depth" of crossover participation, we do analyze all available frequency of participation data from the 1992 survey.

Multiparticipation

On the most basic level, multiparticipation or crossover arts participation can be defined as participation in more than one art activity. This multiparticipation can be within a discipline such as when people both listen to jazz on the radio and on recordings, or across disciplines such as watching both opera and classical music performances on television or videotapes.

It is one of the themes of this monograph that while crossover participation occurs among a wide variety of disciplines and venues, it should only be investigated when significant numbers of people participate in two or more activities so as to indicate a relationship among the activities. Hence, this monograph will not concern every instance of multiparticipation found in the SPPA surveys. We will, instead, posit groups of activities that compose crossover types. These types are determined by investigating correlations among variables, examining crosstabulations of these variables to see if a strong correlation translates into significant proportions of participants, and testing our groups through cluster and factor analyses.

Positing and examining types of crossover participation simplifies our task in that we are not required to speculate why five people out of a sample of thousands choose to attend both jazz and opera performances. This simplification enables us to examine in more depth where crossover is more significant, and speculate about what multiparticipation means for the disciplines and venues involved.

Basic Themes of This Monograph

As in all monographs analyzing SPPA data, our purpose is to investigate what SPPA data can indicate about the subject in question, and to inform discussion about many aspects of arts policy.

In chapter two, we will examine correlations of participation variables, extract themes across the three survey years and examine crosstabulations of variables that are strongly correlated. We will also examine frequency of participation data from the 1992 survey in order to see if the frequency in which individuals participate in more than one activity adds to our understanding of the multiparticipation groups developed in chapter two.

In chapter three, we will discuss the demographic characteristics of multiparticipants as indicated by those who participate in our crossover groups. This demographic data will be examined across the survey years and compared to characteristics of non-participants.

In chapter four, we will further elaborate on how multiparticipants may be categorized through the use of cluster and factor analyses. Our intention here is to test our crossover groupings and indicate other concerns that would link arts participants.

In chapter five, we will draw together all the themes found in previous chapters to speculate on how data on multiparticipants can be utilized in areas such as audience development and marketing the arts.

CHAPTER TWO: CROSSOVER PARTICIPATION AMONG THE CORE ACTIVITIES

In the 1982, 1985 and 1992 SPPA surveys, there are many respondents who engage in multiple arts activities. A simple crosstabulation of all core activity variables reveals that for most combinations of two variables, some respondents participated in both. However, for most of these combinations of variables, the percentage of the survey sample participating is minuscule, and an analysis of what these types of multiparticipation mean would be largely anecdotal.

The research problem of an analysis of multiparticipation is to determine which arts activities have crossover participation that is statistically significant and meaningful to discussions of why people participate in more than one art activity and what patterns among activities this multiparticipation reveals. In this monograph, our first step will be to determine which art activities are closely related in terms of participation. From this determination a number of descriptive and analytical discussions will evolve. In order to determine strong associations between participation in art activities, we will employ a statistical procedure known as Pearson's r or more commonly "correlations."

Correlations. Pearson's Correlation, or Pearson's r is a statistical procedure that measures the degree of association between pairs of variables. Variables can be associated in many ways. For example, it is generally recognized that education and income are causally related - increases in education are responsible for increases in income. But other activities may be related without being causal. These activities are related because behavior or preferences of respondents have linked them in some manner, but the linkage itself is not determined.

Strongly correlated pairs of variables are those where a change in one variable is likely to produce a change in the other. For example, if we know that two activities are highly correlated, then efforts to produce a change in one will have a predictable effect in the other.

The strength of correlation between pairs of variables is indicated by coefficients ranging from +1 to -1. Perfectly correlated variables have a coefficient of +1. Respondent behavior in one activity would indicate a similar behavior in the other activity in all cases. Conversely, activities that have a coefficient of -1 are inversely related. Respondent behavior in one activity indicates a reverse behavior in the other activity. Most pairs of variables have coefficients of between +1 and -1. Very few perfect positive or negative correlations occur in randomly gathered data. In this monograph, we regard a strong correlation between any two variables to be indicated by a

coefficient of at least .3999 for positive correlations and -.3999 for negative correlations.

Correlations Among Core Arts Activities

In our correlation analysis of core activities across the three survey years, we chose to highlight those pairs of variables where correlation coefficients reached at least .4000 for one of the three survey years. Many of these pairs were strongly correlated at or above .4000 for all three years. Even among those pairs of variables that only correlated at this high level in only one or two years, the remaining years had coefficients high enough to include them as strongly correlated activities.

Across the three survey years there are 26 pairs of strongly correlated variables. These 26 pairs of variables can be grouped into five types of arts activity. These types of arts activity can be described as: (1) involvement in jazz; (2) involvement in live plays or musicals; (3) watching traditional European artforms; (4) involvement in classical music; and (5) involvement in opera and activities related to the discipline of opera. There are three other pairs of strongly correlated activities found among the new variables in the 1992 survey. Since these correlated activities occur in only one year, they are not included in our five typologies, but are considered separately.

As we noted in our introduction, there is very little correlation among arts activities that are not in some way already related. Table 1 displays the 26 pairs of variables along with their coefficients for all three survey years.

Involvement in Jazz. There are very strong correlations among all jazz activities in each survey year. As Table 1 indicates, involvement in jazz through similar venues, such as listening to jazz recordings and on the radio are more highly correlated than those jazz activities that cross venues, such as the lower correlations for enjoying live jazz and listening to jazz recordings.

Enjoying live jazz performances is strongly correlated only with listening to jazz recordings, whereas all variables that concern participation in jazz through media are strongly correlated with each other. This reflects the usual SPPA finding that participation in the arts through media is more common than attendance at live events.

Involvement in Live Plays and Musicals. Two of the four live attendance variables that demonstrate strong correlations are those that concern plays and musicals. Interestingly, attendance at these live events is not as highly correlated with consumption

of these artforms through media, perhaps reflecting the fewer media outlets where these artforms appear, or perhaps indicating that experiencing these similar events live is more enjoyable than watching or listening to them.

Watching Traditional European Artforms. Most of the strong correlations across disciplines appear among variables that concern watching traditional European artforms. As Table 1 indicates, there are very strong associations among those who participate in art programs, plays, musicals, opera, classical music and dance through television or videos. In fact, it is the consumption of these artforms though television or video that is most compelling about this grouping of correlated pairs of activities. We expect individuals involved in stage plays to also enjoy and consume musicals, and we are not surprised when consumers of classical music also enjoy opera. We did not, however, expect that the major strong correlation among these artforms to be through television and videos. There is less significant correlation between the consumption of these traditional European artforms through media and their live attendance counterparts.

Involvement in Classical Music. Aside from jazz, classical music is the one artform where there is considerable crossover between live and media participation, and among the various media outlets. Like the correlation among jazz activities, participants in live classical music also are strongly associated with listening to classical music recordings. Also similar to jazz correlations is the finding that all variables concerning participation in classical music through media are strongly correlated with each other.

The similar correlation "pattern" in jazz activities and classical music activities is probably due not to similarities between the types of music, although some have argued that the structure of jazz is not vastly distinct from that of classical music. Rather, similar correlation patterns in the two types of music activities is probably because they are the only two types of music listed among the core arts activities in all three survey years, and attending live performances of *any* type of music and listening to recordings of that same music are always strongly associated.

Involvement in Opera and Related Activities. There is a strong correlation among variables that concern the enjoyment of opera through media. Reflecting its generally low participation rates, attendance at live opera is not strongly correlated with any other variable either within or outside the discipline of opera.

The enjoyment of opera through media is strongly correlated with media enjoyment of other artforms. As Table 1 indicates, listening to recordings or broadcasts of opera is strongly

correlated to enjoying recordings or broadcasts of similar artforms such as classical music and musical plays. Again, these correlations are probably strongly motivated by the availability and popularity of radio and recordings, but the similarity among the disciplines of opera, musical plays and classical music must also be considered a motivation. Across all three surveys, there is little association among media participation in artforms that are not in some ways similar in discipline.

Activities New in the 1992 Survey. Of the three pairs of strongly correlated activities found among the new variables of the 1992 survey, two of the pairs, visiting parks - visiting art museums and visiting parks - visiting art fairs, obviously describe the likelihood that respondents who visit such facilities as parks also find attractive arts events in similar settings or visits to museums.

The strongest correlation among all variables in 1992 (and higher than any correlation between pairs of variables in '82 and '85) is between readers of novels and readers of books. The fact that respondents may have had difficulty distinguishing between these two activities suggests that this high correlation is not unusual.

Findings From Across the Groupings. A few themes appear across the groupings of activities listed above. First, among all types of media used to participate, records and tapes are the media most intermixed with other ways of experiencing the arts. Of the 26 pairs of correlated activities, nine involve participation through recordings.

Second, there is a good "mix" or cross-correlation among all performing artforms except jazz and ballet. Jazz activities only correlate strongly with other jazz activities, while no ballet activity strongly correlates with any other activity either within or outside the discipline. Although ballet has a general participation rate higher than activities such as opera, it is probably the case that since ballet and other dance cannot be enjoyed through media except on television, fewer opportunities for participation may result in fewer correlations with other artforms.

Nevertheless, the opportunity to watch ballet on television or video does not translate into strong correlation with other traditional European artforms watched on television or video. Watching ballet does not correlate strongly with any of the seven "watched" artforms listed as strong correlates of one another.

Correlations Among Live and Media Arts Activities. Among all the strong correlations, there is an obvious shortage of live participation activities associated with either other live activity or media participation variables. In Table 1, there are only four live activity variables listed and two of them are correlated with each other. As we noted above, the two live activity variables that are strongly correlated with media variables are indicative of the close relationship between attending live music events and listening to the same music on recordings. This relationship is the only distinguishable relationship between live and media arts participation evident from correlation analysis.

The few strong correlations between live activities and other live activities, and between live activities and media participation activities, are contrasted with many strongly or significantly correlated media participation variables. Table 1 displays the most strongly associated media participation activities. Table 2 indicates coefficients for all core activities across the three survey years. In this table, one may notice many pairs of media participation variables that have correlation coefficients of between .3000 and .3999. These are considered significant correlations, but are not as compelling as those pairs of variables that produce coefficients higher than .3999.

Why do many media participation variables strongly correlate and most live participation variables do not? Why does watching classical music and watching opera on television or videos produce a strong correlation coefficient of .4311 in 1992, while in the same year the correlation coefficient for live classical music and live opera is a weak .2767? We may assume that differences in content among live and media participation variables are not causing distinctions in the strength of associations. Aside from the relationship between attending live music events and listening to recorded music, live arts events do not correlate highly with any other type of media participation, even within the same discipline.

Participation in the arts through media is generally higher than participation in the arts through live events. This is a reflection of the costs and trouble involved in attending live events, as compared to participating through accessible and inexpensive media outlets. We should not be surprised then that even among those who attend live events, there is only a small likelihood that they will attend live events in other disciplines, especially if the other disciplines are not similar to what they already devote their time and resources to attending.

The converse is true of participation through media. The ease in which one may participate in recorded or broadcast events

enables greater participation generally as well as participation in more than one discipline. As we noted, multiparticipation is still largely contained within activities that are similar in content, but the ease in which one may participate through media means that the opportunity to experience other disciplines is more likely in that there is much less commitment of time and resources in doing so.

Crosstabulations of Correlated Arts Activities

All of the pairs of activities discussed above are considered strongly related because our correlation analysis summarizes linkages between each pair of activities based on actual participation data recorded in the SPPA surveys. Substantial correlation coefficients allow us to assume that participating in one listed activity entails the likelihood that respondents will participate in its associated activity.

The relative strength of a correlation between two activities indicates the magnitude of crossover participation between the activities. For example, if a correlation coefficient for the activities of watching dance and watching musicals is .3312, then we would expect a *smaller percentage* of respondents to have participated in both of these activities than for the activities of watching jazz and listening to jazz on the radio with a coefficient of .4887. Hence, the coefficients in Table 1 not only tell us which activities are strongly related and the typologies in which they may be grouped. They also tell us the relative magnitude of crossover participation that each pair of activities represents.

The magnitude of crossover participation is also indicated by the percentages of respondents reporting participation in each of the pairs of activities. Table 3 contains these percentages and, as an indicator of the magnitude of crossover participation, is roughly comparable to the coefficients in Table 1.

Percentages of participants in each pair of activities can indicate a few things that coefficients cannot. The percentages of respondents reporting participation in each pair of activities can be more readily used to understand increases and decreased in crossover participation than can coefficients. Similarly, we can compare percentages of crossover participation with rates of participation in single activities in order to contrast the subset of multiparticipants with the larger group of all participants.

Rates of Multiple Arts Participation. Table 3 compares rates of participation for strongly associated pairs of activities across

the three survey years. Obviously, the rates of participation for each pair of activities will be smaller than rates of participation for any single arts activity included in the groupings.

It will always be the case that rates of crossover participation will be smaller than those for single activity participation, except for those activities that are perfectly correlated. A perfect correlation between two activities would mean that every person who participates in one activity would also participate in the other. The rate of crossover participation would be exactly the same as the rates of single participation in each activity. As we noted above, perfect correlations are rare in randomly gathered data.

Rates of participation for many of the pairs of activities in Table 3 remain very consistent. There is no statistically significant percentage point change in 15 of the 26 pairs of activities across the three survey years. There are, however, some interesting changes in rates of participation for a few of the associated pairs of activities. As Table 3 indicates, there are noticeable increases in the percentage of people participating in the constellation of media jazz activities (watching and listening to jazz on radio and recordings).

Similarly, slight increases in the percentage of people who watch art programs and watch classical music, and who watch art programs and watch dance, are noticeable. Interestingly, there is no increase in those who watch classical music and watch dance. This suggests that an increase in watching art programs is primarily responsible for an increase in participation for those pairs of activities that include watching arts programs.

There are noticeable increases in participation among three of the four pairs of associated activities that concern classical music. In Table 3, one notices that while rates of participation have increased for two activities associated with listening to classical recordings, there is no significant increase in participation in listening to classical recordings and watching classical music on television or video. There is a significant increase in participation among those who listen to classical music on the radio and watch classical music on television or video.

The pairs of associated activities concerning opera are very stable across the three years. Only one pair of activities, listening to opera on radio and listening to classical music on radio has increased.

We expected a participation increase in the 1992 pairs of associated activities that concern watching art performances or

programs because of the addition of VCRs to questions about experiencing the arts on television. This increase did not occur among the majority of "watching" questions. While three of the associated activities that included watching an artform did have participation increases, participation in eight associated pairs of activities that contained watching artforms remained steady, and two of the pairs of associated activities that contain artforms that would very likely be watched on VCRs (watching plays and musicals, and watching plays and classical music) declined in participation.

Crossover Participation Rates and Single Participation Rates. As we noted above, rates of multiparticipation are always smaller than rates for participation in single arts activities. Table 4 contains participation rates for each of the activities contained in any of the associated pairs of activities listed in Table 3. A comparison of Tables 3 and 4 indicates that, across the three survey years, the difference between multiparticipation rates and single participation rates is least for those activities that concern opera, and greatest for many of the activities that concern jazz.

A comparison of Tables 3 and 4 also reveals the not unexpected finding that changes in participation rates found among associated pairs of activities are largely reflected in the single activities that compose the pairs. That is, among single participation rates across the three survey years, participation in jazz through media, watching art programs and listening to classical music on radio and recordings are increasing. Participation rates for watching plays and musicals have declined.

Proportions of Multiparticipants. Much of our preceding analyses have concerned *rates* of multiparticipation. However, one interesting way to examine pairs of associated arts activities would be to investigate the proportion of crossover participation represented by participants in each single activity. By comparing percentages of single activity participants that also engage in another activity, one can discover the "primary" activity among any associated pair.

Table 5 contains percentages that indicate the proportions of single activity participants that also engage in that activity's strongly associated pair. The pairs of arts activities listed to the left in the table are the same variables we have highlighted so far. For each survey year, column "A" lists the percentage of participants in the first activity who also participate in the second. Column "B" lists the percentage of participants in the second activity who also participate in the first.

The proportions in Table 5 do indicate some interesting

findings. Overall, one can see from the table that greater percentages of those who participate in live events also participate in the same artform through media than vice versa. For example, in 1982 for the correlated activity of jazz recording and live jazz, 65.5 percent of those who attended live jazz events also listened to jazz recordings. Only 32.7 percent of those who listened to jazz recordings also attended live jazz events.

From this example, one could surmise that for various reasons attendance at live jazz events is more likely to produce consumption of jazz recordings than consumption of jazz recordings is to prompt attendance at live jazz events. In this case, attendance at live jazz events would be the "primary" activity in the associated pair of listening to jazz recordings and attending live jazz events.

From Table 5 one may notice that the few live arts events included are always the "primary" activity of their pairs. This should not be surprising since one may assume that an interest in attending live performances of an artform would naturally lead to easier and more accessible participation in the same artform through media. Aside from the live activity variables, and the activity of watching opera paired with non-opera activities, there are no other *types* of activities that are generalizable as primary in many contexts. For most of the associated pairs of activities, the primary activity depends largely on the character of the pairing.

Other overall findings indicated in Table 5 include a surprising stability in the proportions measured across the three survey years. For most of the associated pairs of activities, there is not a large percentage point increase or decrease in the percentage of single activity respondents that also engage in its associated activity.

There is also little change in the percentage point difference between the proportions of participants in each activity of an associated pair except the associated pair of attending live plays and live musicals and those activities that concern watching traditional European artforms. Among these associated pairs of activities, there are some significant changes in the difference between percentages of respondents in each single activity that also engage in its associated activity. These changes are discussed below.

Specific findings from Table 5 are best discussed within the context of the activity groupings we established in Chapter Two. That is, *among pairs of activities concerning involvement in jazz*, there is a relative equilibrium among all pairs of activities that involve experiencing jazz through the media. In

1982 and 1985, the percentages of people who enjoy jazz recordings and watch jazz are roughly the same as those who watch jazz and enjoy jazz recordings. There is no discernible "primary" activity in this pair or in the pairs of jazz on radio - jazz recordings and watching jazz - jazz on radio. Only in 1992 do significant percentage point differences evolve between the proportions reported for these latter two pairings.

In the two activities that concern *involvement in live plays or musicals*, there is a steady decline in the percentage point difference between the proportions for each activity. In 1982, attendance at live plays is clearly the primary activity when related to attendance at live musicals (a 22 percentage point difference). By 1992, the difference had declined to 12 percentage points, perhaps indicating a change in how participants in both activities regard either or both artforms, or indicating a similarity in the two activities in 1992 that was not evident in 1982.

As we noted above, many of the changes shown in Table 5 are among activities *concerning watching traditional European artforms*. The first three pairs of this type of activity are watching operas, watching musicals and watching dance with watching classical music. Among these pairings, watching classical music is never the primary activity, with differences as high 41.9 percentage points between watching opera and watching classical music in 1992. Conversely, watching classical music is the primary activity when paired with watching art programs in 1985 and 1992.

For the associated pairs of watching plays - watching musicals and watching dance - watching musicals, there is a growing parity between proportions. Because basic SPPA participation rates indicate that the popularity of watching musicals has declined, this increasing parity of watching musicals in these pairings is again probably due to how multiparticipants regard their involvement in these associated activities. Whatever the reason, the secondary standing of watching musicals in these pairings is largely eliminated by 1992.

There are a few interesting findings among those pairs of *activities concerning opera and related activities*. For the pairs of activities that concern opera and classical music, participants in opera activities are far more likely to participate in classical music than are classical music participants to participate in opera activities. This is not the case for the associated pair of opera recordings and musical recordings nor the associated pair of opera on radio and musicals on radio. Across all three years, there is almost an equilibrium

between proportions of participants in the former pair of activities, while in the latter pair, listeners to opera on radio are much more likely to watch opera than are watchers of opera are to listen to opera on radio.

Among the pairings that concern only opera activities, watching opera is secondary to associated activities of listening to opera on radio or recordings. The pair of opera recordings and opera on radio are roughly equal in proportions of participants except in 1992 where listeners to opera recordings are slightly more likely to listen to opera on radio than are listeners of opera on radio to enjoy recordings of opera.

Frequency of Participation in Correlated Arts Activities

Thus far we have approached multiparticipation from the perspective that any experience in two or more of the associated activities constitutes crossover arts participation. We have regarded those who listen to opera music on the radio twenty times and listen to recorded musicals one time in the same manner as those who attended live musicals and live plays hundreds of times.

However, the number of times in which respondents participate in multiple arts activities can be instructive. But, because only 1992 SPPA survey contains frequency of participation data, and only for some of the core activities, we must regard any findings from this data as less than conclusive. The 1992 survey only has frequency of participation data for 12 of the 26 strongly associated pairs of arts activities.

Frequency of Participation Among Selected Core Activities. Because every SPPA survey has shown that arts participation among the American public is not as wide spread as we might want, we fully expected the majority of crossover participation to consist of individuals participating in one main activity many times and a secondary activity only a few times, or worse, participating in two events one time each. An inspection of the limited frequency data we have indicates that this is not the case. For most strongly associated pairs of arts activities, 14 percent or less are "single" multiparticipants. That is, 14 percent or less of all respondents engaging in more than one activity engaged in any pair of associated activities only one time.

A similar result was found when we looked for multiparticipants that engaged in one activity many times and a secondary activity only one time. Twenty percent or less of all respondents engage in one art activity two to five times and a second activity only once.

In our frequency of participation crosstabulations of available data, a majority of multiparticipants cluster around five or fewer occasions of participation for each of the strongly associated pairs of activities. This five or fewer occurrence cluster of multiparticipation is lowest for watching dance and watching art programs (51%), and highest for attending live plays and live musicals (84%).

The largest portion of participants within the five or fewer cluster occurs among those participating in each of the associated pairs of activities two to five times. In fact, one-third or more of all multiparticipants participate in their pairs of activities two to five times. For pairs of variables such as watching opera - watching musicals and watching opera - watching dance, the percentage of multiparticipants engaging in each of the pairs of activities was 39 percent and 37 percent respectively.

The manner in which frequency of multiparticipation clusters around five or fewer occurrences is not surprising. What is surprising is the plurality of participation that occurs in the two to five occasion range. In every available frequency of participation variable, this range of participation is always the highest in percentage of respondents. This may be due to how we segmented frequency of participation data - two to five occurrences would be a more likely answer than five or more for most individuals, or it may be due to how respondents estimated or guessed at the number of occasions they participated in the last year. Two to five is a likely range for anyone attempting to estimate their arts participation in the last year.

Frequency of Participation Among Multi- and Single Participants. Inspection of frequency of participation data for single activities reveals many of the same patterns of distribution found in frequency of participation among strongly associated activities. This should not be surprising. In addition to large majorities of respondents indicating that they participate in single activities on five or less occasions, frequency of participation data for single activities is related to frequency data for crossover pairs of activities in the same manner as rates of participation data for single activities are related to rates of participation for our associated pairs of activities. That is, participation data for single activities is always proportionately larger than crossover data in that the fact of multiparticipation necessarily excludes those who only choose to engage in one activity.

TABLE 1: STRONGLY CORRELATED CORE ACTIVITIES ACROSS THREE SURVEY YEARS

	CORRELATED ACTIVITIES	CORRELATION COEFFICIENTS 1982	1985	1992
TYPE 1	JAZZ RECORDINGS – LIVE JAZZ	.3785	.3916	.4055
	JAZZ RECORDINGS – WATCHING JAZZ	.4460	.4320	.4610
	JAZZ ON RADIO – JAZZ RECORDINGS	.5463	.5395	.6132
	WATCHING JAZZ – JAZZ ON RADIO	.3963	.4357	.4887
TYPE 2	LIVE PLAYS – LIVE MUSICALS	.4067	.4168	.3718
TYPE 3	WATCHING OPERA – WATCHING CLASSICAL	.4766	.4932	.4311
	WATCHING MUSICALS – WATCHING CLASSICAL	.4162	.4546	.4011
	WATCHING DANCE – WATCHING CLASSICAL	.4596	.5088	3821
	WATCHING DANCE – WATCHING OPERA	.4492	.4854	.3465
	WATCHING PLAYS – WATCHING MUSICALS	.4321	.4821	.3649
	WATCHING DANCE – WATCHING MUSICALS	.3582	.4431	.3312
	WATCHING PLAYS – WATCHING CLASSICAL	.3796	.4482	.3427
	WATCHING ART PROG – WATCHING CLASSICAL	.3858	.4300	.3868
	WATCHING MUSICALS – WATCHING OPERA	.3679	.4060	.3560
	WATCHING ART PROG – WATCHING DANCE	.3742	.4018	.3430
TYPE 4	CLASSICAL ON RADIO – WATCHING CLASSICAL	.4327	.4922	.4823
	CLASSICAL RECORDINGS – WATCHING CLASSICAL	.4740	.5046	.4401
	CLASSICAL RECORDINGS – CLASSICAL ON RADIO	.4913	.5713	.5784
	LIVE CLASSICAL – CLASSICAL RECORDINGS	.3832	.4207	.3535
TYPE 5	OPERA RECORDINGS – MUSICAL RECORDINGS	.4033	.4140	.3563
	OPERA ON RADIO – CLASSICAL ON RADIO	.4357	.4400	.3923
	OPERA RECORDINGS – CLASSICAL RECORDINGS	.4333	.4509	.3924
	OPERA RECORDINGS – OPERA ON RADIO	.4435	.4737	.4668
	MUSICAL ON RADIO – OPERA ON RADIO	.4436	.3927	.3651
	OPERA ON RADIO – WATCHING OPERA	.3544	.4264	.4011
	OPERA RECORDINGS – WATCHING OPERA	.3810	.4065	.3808
92 ONLY	VISIT PARKS – VISIT ART MUSEUMS	NA	NA	.4334
	VISIT PARKS – VISIT ARTFAIRS	NA	NA	.3999
	READ NOVELS – READ BOOKS	NA	NA	.6469

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1982

		LIVEJAZZ	LIVECLAS	LIVEOPRA	LIVMUSPL	LIVEPLAY	LIVEBAL
LIVEJAZZ		1.0000	.2041	.1072	.1890	.1931	.1558
LIVECLAS		.2041	1.0000	.2645	.3519	.3432	.2815
LIVEOPRA		.1072	.2645	1.0000	.2047	.2139	.2421
LIVMUSPL		.1890	.3519	.2047	1.0000	.4067	.2414
LIVEPLAY		.1931	.3432	.2139	.4067	1.0000	.2450
LIVEBAL		.1558	.2815	.2421	.2414	.2450	1.0000
ARTMUSM		.2236	.3739	.1999	.3401	.3398	.2300
READPRTY		.1566	.2518	.1170	.1871	.2103	.1546
ARTFAIR		.1524	.2413	.0755	.2565	.2044	.1635
WTCHJAZZ		.2862	.1856	.0710	.1580	.1235	.1109
WTCHCLAS		.1293	.3175	.1474	.2416	.1942	.1666
WTCHOPRA		.0787	.2599	.2011	.1746	.1611	.1096
WTCMUSPL		.1194	.2589	.1094	.2804	.1929	.1247
WTCHPLAY		.1573	.2525	.1351	.2737	.2549	.1657
WTCHDNCE		.1769	.2976	.1656	.2288	.2047	.2284
WTARTPRO		.1586	.2376	.1033	.1891	.1493	.1190
JAZZRADO		.3476	.1452	.0685	.1213	.1414	.0946
JAZZTAPE		.3785	.1651	.0281	.1584	.1750	.1442
CLASRADO		.1787	.3254	.1484	.2191	.2193	.1662
CLASTAPE		.1915	.3832	.1507	.2502	.2374	.2263
OPRARADO		.1246	.2421	.2337	.1580	.1760	.1350
OPRATAPE		.0515	.2465	.2192	.1566	.1649	.1693
MUPLRADO		.0581	.1898	.1424	.1020	.1330	.0976
MUPLTAPE		.1183	.2810	.1668	.2535	.2088	.2045
PLAYRADO		.1034	.1320	.1120	.0865	.1252	.1054

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1982

		ARTMUSM	READPRTY	ARTFAIR	WTCHJAZZ	WTCHCLAS	WTCHOPRA
LIVEJAZZ		.2236	.1566	.1524	.2862	.1293	.0787
LIVECLAS		.3739	.2518	.2413	.1856	.3175	.2599
LIVEOPRA		.1999	.1170	.0755	.0710	.1474	.2011
LIVMUSPL		.3401	.1871	.2565	.1580	.2416	.1746
LIVEPLAY		.3398	.2103	.2044	.1235	.1942	.1611
LIVEBAL		.2300	.1546	.1635	.1109	.1666	.1096
ARTMUSM		1.0000	.2800	.3411	.2067	.2968	.2269
READPRTY		.2800	1.0000	.2566	.1577	.2611	.1787
ARTFAIR		.3411	.2566	1.0000	.1549	.2563	.1387
WTCHJAZZ		.2067	.1577	.1549	1.0000	.3140	.2129
WTCHCLAS		.2968	.2611	.2563	.3140	1.0000	.4766
WTCHOPRA		.2269	.1787	.1387	.2129	.4766	1.0000
WTCMUSPL		.2505	.2066	.2228	.2802	.4162	.3679
WTCHPLAY		.3018	.2147	.2445	.3277	.3796	.2690
WTCHDNCE		.2892	.2316	.2041	.2474	.4596	.4492
WTARTPRO		.3094	.2508	.2803	.2943	.3858	.3116
JAZZRADO		.1984	.1799	.1425	.3963	.2017	.1369
JAZZTAPE		.2288	.1749	.1717	.4460	.2000	.1021
CLASRADO		.3194	.2387	.2020	.2358	.4327	.3162
CLASTAPE		.3645	.2796	.2831	.2279	.4740	.3124
OPRARADO		.2091	.1376	.0844	.1149	.2862	.3544
OPRATAPE		.1936	.1735	.1421	.1241	.3113	.3810
MUPLRADO		.2017	.1402	.1146	.1242	.2135	.2337
MUPLTAPE		.2853	.1523	.1822	.1294	.2716	.2299
PLAYRADO		.1553	.1458	.0971	.1041	.1280	.1043

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1982

		WTCMUSPL	WTCHPLAY	WTCHDNCE	WTARTPRO	JAZZRADO	JAZZTAPE
LIVEJAZZ		.1194	.1573	.1769	.1586	.3476	.3785
LIVECLAS		.2589	.2525	.2976	.2376	.1452	.1651
LIVEOPRA		.1094	.1351	.1656	.1033	.0685	.0281
LIVMUSPL		.2804	.2737	.2288	.1891	.1213	.1584
LIVEPLAY		.1929	.2549	.2047	.1493	.1414	.1750
LIVEBAL		.1247	.1657	.2284	.1190	.0946	.1442
ARTMUSM		.2505	.3018	.2892	.3094	.1984	.2288
READPRTY		.2066	.2147	.2316	.2508	.1799	.1749
ARTFAIR		.2228	.2445	.2041	.2803	.1425	.1717
WTCHJAZZ		.2802	.3277	.2474	.2943	.3963	.4460
WTCHCLAS		.4162	.3796	.4596	.3858	.2017	.2000
WTCHOPRA		.3679	.2690	.4492	.3116	.1369	.1021
WTCMUSPL		1.0000	.4321	.3582	.3339	.1532	.1718
WTCHPLAY		.4321	1.0000	.3644	.3778	.1986	.2623
WTCHDNCE		.3582	.3644	1.0000	.3742	.1945	.1913
WTARTPRO		.3339	.3778	.3742	1.0000	.2137	.2404
JAZZRADO		.1532	.1986	.1945	.2137	1.0000	.5463
JAZZTAPE		.1718	.2623	.1913	.2404	.5463	1.0000
CLASRADO		.2843	.3092	.3271	.2792	.3196	.2536
CLASTAPE		.2715	.3204	.3711	.3250	.2373	.3423
OPRARADO		.2115	.1876	.2698	.1547	.1641	.1269
OPRATAPE		.2386	.2125	.2947	.1916	.1081	.1472
MUPLRADO		.2055	.1626	.1763	.1889	.1450	.1143
MUPLTAPE		.2575	.2459	.2705	.1990	.1224	.1730
PLAYRADO		.1189	.2088	.1428	.1534	.1216	.1265

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1982

		CLASRADO	CLASTAPE	OPRARADO	OPRATAPE	MUPLRADO	MUPLTAPE	PLAYRADO
LIVEJAZZ		.1787	.1915	.1246	.0515*	.0581	.1183	.1034
LIVECLAS		.3254	.3832	.2421	.2465	.1898	.2810	.1320
LIVEOPRA		.1484	.1507	.2337	.2192	.1424	.1668	.1120
LIVMUSPL		.2191	.2502	.1580	.1566	.1020	.2535	.0865
LIVEPLAY		.2193	.2374	.1760	.1649	.1330	.2088	.1252
LIVEBAL		.1662	.2263	.1350	.1693	.0976	.2045	.1054
ARTMUSM		.3194	.3645	.2091	.1936	.2017	.2853	.1553
READPRTY		.2387	.2796	.1376	.1735	.1402	.1523	.1458
ARTFAIR		.2020	.2831	.0844	.1421	.1146	.1822	.0971
WTCHJAZZ		.2358	.2279	.1149	.1241	.1242	.1294	.1041
WTCHCLAS		.4327	.4740	.2862	.3113	.2135	.2716	.1280
WTCHOPRA		.3162	.3124	.3544	.3810	.2337	.2299	.1043
WTCMUSPL		.2843	.2715	.2115	.2386	.2055	.2575	.1189
WTCHPLAY		.3092	.3204	.1876	.2125	.1626	.2459	.2088
WTCHDNCE		.3271	.3711	.2698	.2947	.1763	.2705	.1428
WTARTPRO		.2792	.3250	.1547	.1916	.1889	.1990	.1534
JAZZRADO		.3196	.2373	.1641	.1081	.1450	.1224	.1216
JAZZTAPE		.2536	.3423	.1269	.1472	.1143	.1730	.1265
CLASRADO		1.0000	.4913	.4357	.3323	.3109	.2951	.1976
CLASTAPE		.4913	1.0000	.3242	.4333	.2540	.3933	.1790
OPRARADO		.4357	.3242	1.0000	.4435	.4436	.2336	.1696
OPRATAPE		.3323	.4333	.4435	1.0000	.2679	.4033	.1090
MUPLRADO		.3109	.2540	.4436	.2679	1.0000	.2979	.2278
MUPLTAPE		.2951	.3933	.2336	.4033	.2979	1.0000	.1374
PLAYRADO		.1976	.1790	.1696	.1090	.2278	.1374	1.0000

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1985

		LIVEJAZZ	LIVECLAS	LIVEOPRA	LIVMUSPL	LIVEPLAY	LIVEBAL
LIVEJAZZ		1.0000	.2640	.1469	.1988	.2239	.1899
LIVECLAS		.2640	1.0000	.2843	.3348	.3504	.2907
LIVEOPRA		.1469	.2843	1.0000	.2136	.2117	.2598
LIVMUSPL		.1988	.3348	.2136	1.0000	.4168	.2102
LIVEPLAY		.2239	.3504	.2117	.4168	1.0000	.2237
LIVEBAL		.1899	.2907	.2598	.2102	.2237	1.0000
ARTMUSM		.2677	.3789	.1918	.3296	.3298	.2209
READPRTY		.1625	.2071	.0889	.1829	.1751	.1116
ARTFAIR		.2283	.2930	.1272	.2815	.2574	.1982
WTCHJAZZ		.2758	.2046	.0704	.1857	.0977	.1309
WTCHCLAS		.1458	.3678	.1678	.2966	.2299	.1761
WTCHOPRA		.1000	.2702	.2292	.1759	.1909	.1437
WTCMUSPL		.1009	.2246	.1493	.2795	.2041	.1373
WTCHPLAY		.1930	.3124	.1779	.3078	.2743	.1880
WTCHDNCE		.1532	.2889	.1836	.2200	.2029	.2406
WTARTPRO		.1574	.2285	.1424	.1881	.1719	.1428
JAZZRADO		.3713	.2389	.1443	.2031	.1997	.1356
JAZZTAPE		.3916	.2423	.1196	.2102	.1936	.1518
CLASRADO		.1934	.3918	.2242	.2419	.2699	.2105
CLASTAPE		.2247	.4207	.1529	.2414	.2857	.1908
OPRARADO		.0755	.2618	.2847	.1485	.1456	.1520
OPRATAPE		.1084	.2478	.2809	.1732	.1961	.1769
MUPLRADO		.0977	.2321	.2118	.1936	.1495	.1573
MUPLTAPE		.1867	.3115	.1424	.2969	.2833	.2193
PLAYRADO		.1193	.1826	.2198	.1414	.1449	.1539

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1985

		ARTMUSM	READPRTY	ARTFAIR	WTCHJAZZ	WTCHCLAS	WTCHOPRA
LIVEJAZZ		.2677	.1625	.2283	.2758	.1458	.1000
LIVECLAS		.3789	.2071	.2930	.2046	.3678	.2702
LIVEOPRA		.1918	.0889	.1272	.0704	.1678	.2292
LIVMUSPL		.3296	.1829	.2815	.1857	.2966	.1759
LIVEPLAY		.3298	.1751	.2574	.0977	.2299	.1909
LIVEBAL		.2209	.1116	.1982	.1309	.1761	.1437
ARTMUSM		1.0000	.2563	.3344	.2311	.3445	.2675
READPRTY		.2563	1.0000	.2904	.	.	.
ARTFAIR		.3344	.2904	1.0000	.	.	.
WTCHJAZZ		.2311	.	.	1.0000	.3358	.2405
WTCHCLAS		.3445	.	.	.3358	1.0000	.4932
WTCHOPRA		.2675	.	.	.2405	.4932	1.0000
WTCMUSPL		.2384	.	.	.2612	.4546	.4060
WTCHPLAY		.3265	.	.	.2786	.4482	.3499
WTCHDNCE		.3119	.	.	.2872	.5088	.4854
WTARTPRO		.2875	.	.	.2714	.4300	.3662
JAZZRADO		.2576	.	.	.4357	.2408	.2064
JAZZTAPE		.2884	.	.	.4320	.2323	.1324
CLASRADO		.3686	.	.	.2508	.4922	.3522
CLASTAPE		.3716	.	.	.2651	.5046	.3547
OPRARADO		.2653	.	.	.1493	.3751	.4264
OPRATAPE		.2717	.	.	.1507	.3715	.4065
MUPLRADO		.1742	.	.	.1486	.2852	.2799
MUPLTAPE		.2734	.	.	.1555	.3011	.2611
PLAYRADO		.1997	.	.	.1316	.2105	.1928

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1985

		WTCMUSPL	WTCHPLAY	WTCHDNCE	WTARTPRO	JAZZRADO	JAZZTAPE
LIVEJAZZ		.1009	.1930	.1532	.1574	.3713	.3916
LIVECLAS		.2246	.3124	.2889	.2285	.2389	.2423
LIVEOPRA		.1493	.1779	.1836	.1424	.1443	.1196
LIVMUSPL		.2795	.3078	.2200	.1881	.2031	.2102
LIVEPLAY		.2041	.2743	.2029	.1719	.1997	.1936
LIVEBAL		.1373	.1880	.2406	.1428	.1356	.1518
ARTMUSM		.2384	.3265	.3119	.2875	.2576	.2884
READPRTY		.	.	.	.	.	.
ARTFAIR		.	.	.	.	.	.
WTCHJAZZ		.2612	.2786	.2872	.2714	.4357	.4320
WTCHCLAS		.4546	.4482	.5088	.4300	.2408	.2323
WTCHOPRA		.4060	.3499	.4854	.3662	.2064	.1324
WTCMUSPL		1.0000	.4821	.4431	.3762	.1825	.1848
WTCHPLAY		.4821	1.0000	.3571	.3663	.2325	.1905
WTCHDNCE		.4431	.3571	1.0000	.4018	.1920	.1954
WTARTPRO		.3762	.3663	.4018	1.0000	.2283	.2310
JAZZRADO		.1825	.2325	.1920	.2283	1.0000	.5395
JAZZTAPE		.1848	.1905	.1954	.2310	.5395	1.0000
CLASRADO		.3719	.4008	.3677	.3447	.3969	.2842
CLASTAPE		.3304	.3854	.3525	.3519	.2880	.3407
OPRARADO		.2698	.2870	.3528	.2675	.1940	.1679
OPRATAPE		.2999	.2866	.2871	.2658	.1833	.1766
MUPLRADO		.2654	.2483	.2449	.1435	.1714	.1155
MUPLTAPE		.3314	.3079	.2893	.2057	.1997	.2370
PLAYRADO		.1856	.2748	.1830	.1701	.1470	.1266

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1985

		CLASRADO	CLASTAPE	OPRARADO	OPRATAPE	MUPLRADO	MUPLTAPE	PLAYRADO
LIVEJAZZ		.1934	.2247	.0755	.1084	.0977	.1867	.1193**
LIVECLAS		.3918	.4207	.2618	.2478	.2321	.3115	.1826**
LIVEOPRA		.2242	.1529	.2847	.2809	.2118	.1424	.2198**
LIVMUSPL		.2419	.2414	.1485	.1732	.1936	.2969	.1414**
LIVEPLAY		.2699	.2857	.1456	.1961	.1495	.2833	.1449**
LIVEBAL		.2105	.1908	.1520	.1769	.1573	.2193	.1539**
ARTMUSM		.3686	.3716	.2653	.2717	.1742	.2734	.1997**
READPRTY		.	.	.	.	.	.	.
ARTFAIR		.	.	.	.	.	.	.
WTCHJAZZ		.2508	.2651	.1493	.1507	.1486	.1555	.1316**
WTCHCLAS		.4922	.5046	.3751	.3715	.2852	.3011	.2105**
WTCHOPRA		.3522	.3547	.4264	.4065	.2799	.2611	.1928**
WTCMUSPL		.3719	.3304	.2698	.2999	.2654	.3314	.1856**
WTCHPLAY		.4008	.3854	.2870	.2866	.2483	.3079	.2748**
WTCHDNCE		.3677	.3525	.3528	.2871	.2449	.2893	.1830**
WTARTPRO		.3447	.3519	.2675	.2658	.1435	.2057	.1701**
JAZZRADO		.3969	.2880	.1940	.1833	.1714	.1997	.1470**
JAZZTAPE		.2842	.3407	.1679	.1766	.1155	.2370	.1266**
CLASRADO		1.0000	.5713	.4400	.3367	.3476	.3205	.2559**
CLASTAPE		.5713	1.0000	.3796	.4509	.3125	.4125	.2018**
OPRARADO		.4400	.3796	1.0000	.4737	.3927	.2397	.3007**
OPRATAPE		.3367	.4509	.4737	1.0000	.2798	.4140	.2187**
MUPLRADO		.3476	.3125	.3927	.2798	1.0000	.3747	.2653**
MUPLTAPE		.3205	.4125	.2397	.4140	.3747	1.0000	.1894**
PLAYRADO		.2559	.2018	.3007	.2187	.2653	.1894	1.0000

TABLE 2: CORRELATION COEEFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1992

		LIVEJAZZ	LIVECLAS	LIVEOPRA	LIVMUSPL	LIVEPLAY	LIVEBAL
LIVEJAZZ		1.0000	.2777	.1471	.2411	.2651	.1707
LIVECLAS		.2777	1.0000	.2767	.3380	.3284	.2585
LIVEOPRA		.1471	.2767	1.0000	.2176	.1871	.2240
LIVMUSPL		.2411	.3380	.2176	1.0000	.3718	.2135
LIVEPLAY		.2651	.3284	.1871	.3718	1.0000	.2072
LIVEBAL		.1707	.2585	.2240	.2135	.2072	1.0000
LIVEDNCE		.1955	.2220	.1071	.1912	.1873	.1873
ARTMUSM		.2887	.3473	.1898	.3388	.3280	.2197
ARTFAIR		.2210	.2462	.1142	.2855	.2446	.1398
VSTPARK		.2274	.2680	.1266	.2879	.2703	.1582
READBOOK		.1787	.2084	.1011	.2174	.2076	.1244
READPLAY		.1411	.1793	.1078	.1585	.1958	.1270
READPTRY		.1793	.2318	.1217	.2033	.2179	.1553
READNVEL		.1640	.2034	.1037	.2184	.2116	.1230
LSTNPTRY		.1808	.1978	.1003	.1680	.1691	.1204
LSTNREAD		.1188	.1597	.1006	.1353	.1365	.0669
WTCHJAZZ		.3201	.2234	.0963	.1927	.1749	.1066
WTCHCLAS		.1678	.3297	.1707	.2461	.2159	.1600
WTCHOPRA		.1189	.2239	.2037	.1780	.1769	.1501
WTCMUSPL		.1390	.2248	.1537	.2489	.2127	.1368
WTCHPLAY		.1554	.2096	.1224	.2099	.2451	.1142
WTCHDNCE		.1495	.2155	.1053	.1880	.1583	.1862
WTARTPRO		.2007	.2428	.0996	.2243	.1952	.1254
JAZZRADO		.3639	.2238	.1046	.2155	.2064	.1393
JAZZTAPE		.4055	.2327	.1248	.2162	.2185	.1541
CLASRADO		.2083	.3485	.1617	.2734	.2393	.1876
CLASTAPE		.2133	.3535	.1719	.2790	.2555	.2104
OPRARADO		.1230	.2713	.2201	.1705	.1666	.1373
OPRATAPE		.1161	.2496	.2532	.1825	.1671	.1455
MUPLRADO		.0803	.1421	.1225	.1234	.1211	.1032
MUPLTAPE		.1545	.2252	.1491	.2441	.2123	.1333
PLAYRADO		.0853	.0997	.0556	.0676	.1042	.0692

TABLE 2: CORRELATION COEEFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1992

		LIVEDNCE	ARTMUSM	ARTFAIR	VSTPARK	READBOOK	READPLAY
LIVEJAZZ		.1955	.2887	.2210	.2274	.1787	.1411
LIVECLAS		.2220	.3473	.2462	.2680	.2084	.1793
LIVEOPRA		.1071	.1898	.1142	.1266	.1011	.1078
LIVMUSPL		.1912	.3388	.2855	.2879	.2174	.1585
LIVEPLAY		.1873	.3280	.2446	.2703	.2076	.1958
LIVEBAL		.1873	.2197	.1398	.1582	.1244	.1270
LIVEDNCE		1.0000	.2289	.1928	.1787	.1245	.1339
ARTMUSM		.2289	1.0000	.3960	.4334	.3090	.2271
ARTFAIR		.1928	.3960	1.0000	.3999	.3160	.1250
VSTPARK		.1787	.4334	.3999	1.0000	.3013	.1722
READBOOK		.1245	.3090	.3160	.3013	1.0000	.1646
READPLAY		.1339	.2271	.1250	.1722	.1646	1.0000
READPTRY		.1716	.3043	.2423	.2605	.2852	.3579
READNVEL		.1312	.3014	.3169	.3057	.6469	.1979
LSTNPTRY		.1516	.2306	.1789	.2028	.1701	.2464
LSTNREAD		.1152	.2005	.1586	.1902	.1780	.1724
WTCHJAZZ		.1557	.2776	.2197	.2233	.2101	.1544
WTCHCLAS		.1491	.3200	.2579	.2887	.2491	.1678
WTCHOPRA		.1249	.2303	.1533	.1742	.1810	.1655
WTCMUSPL		.1349	.2537	.2160	.2317	.2035	.1688
WTCHPLAY		.1433	.2573	.1999	.2296	.2115	.1844
WTCHDNCE		.2068	.2467	.1966	.2088	.1968	.1559
WTARTPRO		.1682	.3537	.3115	.3272	.2792	.1587
JAZZRADO		.1582	.3066	.2231	.2483	.2272	.1476
JAZZTAPE		.1652	.3059	.2234	.2330	.2314	.1483
CLASRADO		.1737	.3646	.2859	.3097	.2868	.1701
CLASTAPE		.1675	.3641	.2805	.3155	.2883	.1893
OPRARADO		.0984	.2149	.1357	.1749	.1551	.1613
OPRATAPE		.1114	.2232	.1421	.1662	.1566	.1602
MUPLRADO		.0963	.1465	.0828	.1099	.0965	.1186
MUPLTAPE		.1183	.2388	.1389	.1721	.1412	.1704
PLAYRADO		.0931	.1353	.0839	.1072	.0922	.0854

TABLE 2: CORRELATION COEEFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1992

		READPTRY	READNVEL	LSTNPTRY	LSTNREAD	WTCHJAZZ	WTCHCLAS
LIVEJAZZ		.1793	.1640	.1808	.1188	.3201	.1678
LIVECLAS		.2318	.2034	.1978	.1597	.2234	.3297
LIVEOPRA		.1217	.1037	.1003	.1006	.0963	.1707
LIVMUSPL		.2033	.2184	.1680	.1353	.1927	.2461
LIVEPLAY		.2179	.2116	.1691	.1365	.1749	.2159
LIVEBAL		.1553	.1230	.1204	.0669	.1066	.1600
LIVEDNCE		.1716	.1312	.1516	.1152	.1557	.1491
ARTMUSM		.3043	.3014	.2306	.2005	.2776	.3200
ARTFAIR		.2423	.3169	.1789	.1586	.2197	.2579
VSTPARK		.2605	.3057	.2028	.1902	.2233	.2887
READBOOK		.2852	.6469	.1701	.1780	.2101	.2491
READPLAY		.3579	.1979	.2464	.1724	.1544	.1678
READPTRY		1.0000	.3337	.3386	.2301	.2329	.2746
READNVEL		.3337	1.0000	.1848	.1872	.2144	.2539
LSTNPTRY		.3386	.1848	1.0000	.3657	.2306	.2455
LSTNREAD		.2301	.1872	.3657	1.0000	.1507	.1734
WTCHJAZZ		.2329	.2144	.2306	.1507	1.0000	.3574
WTCHCLAS		.2746	.2539	.2455	.1734	.3574	1.0000
WTCHOPRA		.2286	.1791	.2070	.1489	.2662	.4311
WTCMUSPL		.2438	.2299	.2024	.1647	.2948	.4011
WTCHPLAY		.2267	.2276	.2037	.1806	.2829	.3427
WTCHDNCE		.2746	.2074	.2177	.1641	.3268	.3821
WTARTPRO		.2877	.2800	.2457	.1906	.3309	.3868
JAZZRADO		.2352	.2227	.2074	.1690	.4887	.2653
JAZZTAPE		.2238	.2269	.1955	.1619	.4610	.2411
CLASRADO		.2933	.2770	.2468	.2034	.2841	.4823
CLASTAPE		.3061	.2838	.2409	.1992	.2577	.4401
OPRARADO		.2105	.1621	.1841	.1628	.1882	.3329
OPRATAPE		.1877	.1634	.1733	.1268	.1657	.2890
MUPLRADO		.1259	.1000	.1406	.1416	.1390	.1997
MUPLTAPE		.1674	.1487	.1511	.1370	.1746	.2365
PLAYRADO		.1252	.0963	.1481	.1951	.1269	.1432

TABLE 2: CORRELATION COEEFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1992

		WTCHOPRA	WTCMUSPL	WTCHPLAY	WTCHDNCE	WTARTPRO	JAZZRADO
LIVEJAZZ		.1189	.1390	.1554	.1495	.2007	.3639
LIVECLAS		.2239	.2248	.2096	.2155	.2428	.2238
LIVEOPRA		.2037	.1537	.1224	.1053	.0996	.1046
LIVMUSPL		.1780	.2489	.2099	.1880	.2243	.2155
LIVEPLAY		.1769	.2127	.2451	.1583	.1952	.2064
LIVEBAL		.1501	.1368	.1142	.1862	.1254	.1393
LIVEDNCE		.1249	.1349	.1433	.2068	.1682	.1582
ARTMUSM		.2303	.2537	.2573	.2467	.3537	.3066
ARTFAIR		.1533	.2160	.1999	.1966	.3115	.2231
VSTPARK		.1742	.2317	.2296	.2088	.3272	.2483
READBOOK		.1810	.2035	.2115	.1968	.2792	.2272
READPLAY		.1655	.1688	.1844	.1559	.1587	.1476
READPTRY		.2286	.2438	.2267	.2746	.2877	.2352
READNVEL		.1791	.2299	.2276	.2074	.2800	.2227
LSTNPTRY		.2070	.2024	.2037	.2177	.2457	.2074
LSTNREAD		.1489	.1647	.1806	.1641	.1906	.1690
WTCHJAZZ		.2662	.2948	.2829	.3268	.3309	.4887
WTCHCLAS		.4311	.4011	.3427	.3821	.3868	.2653
WTCHOPRA		1.0000	.3560	.2859	.3465	.2968	.1906
WTCMUSPL		.3560	1.0000	.3649	.3312	.3130	.2243
WTCHPLAY		.2859	.3649	1.0000	.3030	.3108	.2332
WTCHDNCE		.3465	.3312	.3030	1.0000	.3430	.2493
WTARTPRO		.2968	.3130	.3108	.3430	1.0000	.2924
JAZZRADO		.1906	.2243	.2332	.2493	.2924	1.0000
JAZZTAPE		.1681	.2211	.2076	.2340	.2585	.6132
CLASRADO		.3139	.3057	.2776	.3148	.3617	.3849
CLASTAPE		.2991	.3029	.2642	.2876	.3289	.3124
OPRARADO		.4011	.2586	.2338	.2665	.2463	.2285
OPRATAPE		.3808	.2339	.2010	.2370	.2214	.1664
MUPLRADO		.2283	.2038	.1945	.1956	.1679	.1504
MUPLTAPE		.2511	.2740	.1974	.2055	.1994	.1686
PLAYRADO		.1553	.1438	.2034	.1430	.1385	.1313

TABLE 2: CORRELATION COEFFICIENTS FOR ALL CORE ARTS ACTIVITIES – 1992

		JAZZTAPE	CLASRADO	CLASTAPE	OPRARADO	OPRATAPE	MUPLRADO	MUPLTAPE	PLAYRADO
LIVEJAZZ		.4055	.2083	.2133	.1230	.1161	.0803	.1545	.0853
LIVECLAS		.2327	.3485	.3535	.2713	.2496	.1421	.2252	.0997
LIVEOPRA		.1248	.1617	.1719	.2201	.2532	.1225	.1491	.0556
LIVMUSPL		.2162	.2734	.2790	.1705	.1825	.1234	.2441	.0676
LIVEPLAY		.2185	.2393	.2555	.1666	.1671	.1211	.2123	.1042
LIVEBAL		.1541	.1876	.2104	.1373	.1455	.1032	.1333	.0692
LIVEDNCE		.1652	.1737	.1675	.0984	.1114	.0963	.1183	.0931
ARTMUSM		.3059	.3646	.3641	.2149	.2232	.1465	.2388	.1353
ARTFAIR		.2234	.2859	.2805	.1357	.1421	.0828	.1389	.0839
VSTPARK		.2330	.3097	.3155	.1749	.1662	.1099	.1721	.1072
READBOOK		.2314	.2868	.2883	.1551	.1566	.0965	.1412	.0922
READPLAY		.1483	.1701	.1893	.1613	.1602	.1186	.1704	.0854
READPTRY		.2238	.2933	.3061	.2105	.1877	.1259	.1674	.1252
READNVEL		.2269	.2770	.2838	.1621	.1634	.1000	.1487	.0963
LSTNPTRY		.1955	.2468	.2409	.1841	.1733	.1406	.1511	.1481
LSTNREAD		.1619	.2034	.1992	.1628	.1268	.1416	.1370	.1951
WTCHJAZZ		.4610	.2841	.2577	.1882	.1657	.1390	.1746	.1269
WTCHCLAS		.2411	.4823	.4401	.3329	.2890	.1997	.2365	.1432
WTCHOPRA		.1681	.3139	.2991	.4011	.3808	.2283	.2511	.1553
WTCMUSPL		.2211	.3057	.3029	.2586	.2339	.2038	.2740	.1438
WTCHPLAY		.2076	.2776	.2642	.2338	.2010	.1945	.1974	.2034
WTCHDNCE		.2340	.3148	.2876	.2665	.2370	.1956	.2055	.1430
WTARTPRO		.2585	.3617	.3289	.2463	.2214	.1679	.1994	.1385
JAZZRADO		.6132	.3849	.3124	.2285	.1664	.1504	.1686	.1313
JAZZTAPE		1.0000	.3082	.3864	.1977	.2102	.1243	.2351	.1363
CLASRADO		.3082	1.0000	.5784	.3923	.2786	.2214	.2307	.1642
CLASTAPE		.3864	.5784	1.0000	.3324	.3924	.2000	.3281	.1665
OPRARADO		.1977	.3923	.3324	1.0000	.4668	.3651	.2600	.1732
OPRATAPE		.2102	.2786	.3924	.4668	1.0000	.2424	.3563	.1357
MUPLRADO		.1243	.2214	.2000	.3651	.2424	1.0000	.3019	.2261
MUPLTAPE		.2351	.2307	.3281	.2600	.3563	.3019	1.0000	.1415
PLAYRADO		.1363	.1642	.1665	.1732	.1357	.2261	.1415	1.0000

TABLE 3: PERCENTAGE OF SURVEY RESPONDENTS ENGAGING IN CORRELATED ACTIVITIES

	CORRELATED ACTIVITIES	PERCENTAGE PARTICIPATING IN BOTH ACTIVITIES 1982	1985	1992
TYPE 1	JAZZ RECORDINGS – LIVE JAZZ	6.6	6.1	7.2
	JAZZ RECORDINGS – WATCHING JAZZ	10.5	9.7	12.3
	JAZZ ON RADIO – JAZZ RECORDINGS	12.1	11.5	17.0
	WATCHING JAZZ – JAZZ ON RADIO	9.1	9.3	15.2
TYPE 2	LIVE PLAYS – LIVE MUSICALS	7.3	6.8	7.1
TYPE 3	WATCHING OPERA – WATCHING CLASSICAL	9.6	9.8	9.3
	WATCHING MUSICALS – WATCHING CLASSICAL	12.2	11.5	11.0
	WATCHING DANCE – WATCHING CLASSICAL	11.3	11.4	11.8
	WATCHING DANCE – WATCHING OPERA	7.3	7.6	6.8
	WATCHING PLAYS – WATCHING MUSICALS	12.8	11.2	8.3
	WATCHING DANCE – WATCHING MUSICALS	8.6	8.7	8.2
	WATCHING PLAYS – WATCHING CLASSICAL	13.5	12.9	10.5
	WATCHING ART PROG – WATCHING CLASSICAL	12.6	14.0	16.4
	WATCHING MUSICALS – WATCHING OPERA	7.2	7.2	6.3
	WATCHING ART PROG – WATCHING DANCE	9.5	10.1	12.6
TYPE 4	CLASSICAL ON RADIO – WATCHING CLASSICAL	12.3	13.6	17.9
	CLASSICAL RECORDINGS – WATCHING CLASSICAL	13.9	13.7	14.7
	CLASSICAL RECORDINGS – CLASSICAL ON RADIO	12.5	13.9	18.9
	LIVE CLASSICAL – CLASSICAL RECORDINGS	9.5	8.1	12.6
TYPE 5	OPERA RECORDINGS – MUSICAL RECORDINGS	3.5	3.4	2.5
	OPERA ON RADIO – CLASSICAL ON RADIO	5.8	5.8	7.7
	OPERA RECORDINGS – CLASSICAL RECORDINGS	6.3	6.3	5.9
	OPERA RECORDINGS – OPERA ON RADIO	3.5	3.5	3.9
	MUSICAL ON RADIO – OPERA ON RADIO	2.6	2.4	2.1
	OPERA ON RADIO – WATCHING OPERA	3.8	4.2	4.7
	OPERA RECORDINGS – WATCHING OPERA	4.1	4.3	4.0
92 ONLY	VISIT PARKS – VISIT ART MUSEUMS	NA	NA	18.3
	VISIT PARKS – VISIT ARTFAIRS	NA	NA	23.3
	READ NOVELS – READ BOOKS	NA	NA	47.5

TABLE 4: PERCENTAGE OF SURVEY RESPONDENTS ENGAGING IN ANY ONE OF THE CORRELATED ACTIVITIES

SINGLE ARTS ACTIVITIES INCLUDED IN ASSOCIATED PAIRS	PERCENTAGE PARTICIPATING		
	1982	1985	1992
JAZZ RECORDINGS	20.2	19.0	20.6
LIVE JAZZ	9.6	9.5	10.6
JAZZ ON RADIO	18.1	17.8	28.2
WATCHING JAZZ	18.0	17.3	21.9
LIVE PLAYS	11.9	11.6	13.5
LIVE MUSICALS	18.6	16.6	17.4
WATCHING OPERA	12.0	12.3	12.1
WATCHING MUSICALS	20.4	17.5	16.9
WATCHING DANCE	16.3	15.3	19.6
WATCHING CLASSICAL	24.7	23.9	26.3
WATCHING PLAYS	25.9	21.4	18.1
WATCHING ART PROGRAMS	22.8	25.4	32.2
CLASSICAL ON RADIO	19.9	21.1	30.8
CLASSICAL RECORDINGS	22.1	20.9	23.8
LIVE CLASSICAL	13.0	12.7	12.5
OPERA RECORDINGS	7.5	7.3	6.9
OPERA ON RADIO	7.1	6.6	8.7
MUSICALS ON RADIO	4.3	4.8	3.5
MUSICAL RECORDINGS	8.4	7.6	5.7
VISIT PARKS	NA	NA	34.5
VISIT ART MUSEUMS	NA	NA	26.7
VISIT ART FAIRS	NA	NA	40.7
READ BOOKS	NA	NA	60.9
READ NOVELS	NA	NA	52.1

TABLE 5: PROPORTION OF SINGLE ACTIVITY PARTICIPANTS THAT ENGAGE IN THE ASSOCIATED ACTIVITY

CORRELATED ACTIVITIES	PROPORTION OF SINGLE ACTIVITY PARTICIPANTS ENGAGED IN ITS ASSOCIATED ACTIVITY					
	1982 A	1982 B	1985 A	1985 B	1992 A	1992 B
JAZZ RECORDINGS – LIVE JAZZ	32.7%	65.5%	32.5%	67.0%	35.4%	67.6%
JAZZ RECORDINGS – WATCHING JAZZ	52.2%	57.8%	50.9%	55.5%	59.8%	55.3%
JAZZ ON RADIO – JAZZ RECORDINGS	66.5%	60.1%	64.3%	60.5%	59.7%	83.0%
WATCHING JAZZ – JAZZ ON RADIO	50.6%	50.5%	53.8%	52.5%	69.6%	54.2%
LIVE PLAYS – LIVE MUSICALS	61.7%	39.4%	59.4%	41.5%	53.1%	41.0%
WATCHING OPERA – WATCHING CLASSICAL	80.2%	39.1%	80.1%	41.1%	77.4%	35.5%
WATCHING MUSICALS – WATCHING CLASSICAL	60.0%	49.4%	66.1%	48.2%	65.5%	42.0%
WATCHING DANCE – WATCHING CLASSICAL	69.6%	45.9%	75.1%	47.9%	60.3%	44.8%
WATCHING DANCE – WATCHING OPERA	45.2%	61.3%	49.8%	61.9%	34.8%	56.5%
WATCHING PLAYS – WATCHING MUSICALS	49.5%	63.1%	52.6%	64.4%	45.8%	49.1%
WATCHING DANCE – WATCHING MUSICALS	52.6%	42.2%	57.1%	50.0%	42.0%	48.6%
WATCHING PLAYS – WATCHING CLASSICAL	52.3%	54.8%	60.4%	54.0%	58.3%	40.0%
WATCHING ART PROG – WATCHING CLASSICAL	55.4%	51.0%	55.4%	58.7%	51.0%	62.3%
WATCHING MUSICALS – WATCHING OPERA	35.6%	60.2%	41.2%	58.7%	37.7%	52.8%
WATCHING ART PROG – WATCHING DANCE	41.8%	58.4%	40.0%	66.3%	39.2%	64.6%
CLASSICAL ON RADIO – WATCHING CLASSICAL	62.3%	49.9%	64.6%	56.8%	58.1%	67.8%
CLASSICAL RECORDINGS – WATCHING CLASSICAL	63.3%	56.2%	65.8%	56.9%	61.8%	54.3%
CLASSICAL RECORDINGS – CLASSICAL ON RADIO	56.8%	62.8%	66.6%	65.5%	79.4%	59.8%
LIVE CLASSICAL – CLASSICAL RECORDINGS	65.6%	34.9%	66.7%	39.1%	62.6%	33.8%
OPERA RECORDINGS – MUSICAL RECORDINGS	47.7%	42.7%	46.4%	45.0%	35.8%	43.5%
OPERA ON RADIO – CLASSICAL ON RADIO	82.8%	29.3%	89.0%	27.6%	89.2%	25.1%
OPERA RECORDINGS – CLASSICAL RECORDINGS	85.2%	28.9%	85.3%	30.2%	84.3%	24.6%
OPERA RECORDINGS – OPERA ON RADIO	47.2%	50.0%	48.2%	54.1%	57.3%	44.8%
MUSICAL ON RADIO – OPERA ON RADIO	59.5%	36.8%	49.8%	36.8%	62.5%	25.2%
OPERA ON RADIO – WATCHING OPERA	53.9%	31.5%	65.2%	34.7%	54.4%	39.0%
OPERA RECORDINGS – WATCHING OPERA	55.6%	34.4%	59.8%	35.7%	58.2%	32.6%
VISIT PARKS – VISIT ART MUSEUMS	NA	NA	NA	NA	53.0%	68.6%
VISIT PARKS – VISIT ARTFAIRS	NA	NA	NA	NA	67.7%	57.4%
READ NOVELS – READ BOOKS	NA	NA	NA	NA	91.2%	77.8%

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CHAPTER THREE: DEMOGRAPHIC CHARACTERISTICS OF MULTIPARTICIPANTS

One finding of other analyses of SPPA data concerns the manner in which sociodemographic considerations influence arts participation. In these studies, it is generally understood that considerations such as higher levels of education, higher household incomes and proximity to urban areas are the major motivators of participation in the arts.

In this chapter we will investigate the demographic characteristics of multiparticipants. Specifically, we will examine the age, race, household income, geographic location, sex and education of respondents who participate in the correlated pairs of activities discussed in previous chapters. We will also compare the demographic characteristics of multiparticipants with those non-participants in order to understand in greater detail those who participate in more than one arts activity.

The General Demography of Multiparticipation.

Among respondents who participated in any of the 26 pairs of activities, there is a common set of characteristics. Generally, multiparticipants in the strongly correlated pairs of arts activities are overwhelmingly white, female, college educated, over 40 years old, have yearly incomes over twenty thousand dollars and live in or near metropolitan areas. These characteristics are predominant in each survey year, and do not vary tremendously among specific pairs of activities. That is, among different pairs of activities, there are variations in percentages of respondents in each demographic category, but these percentages never vary so much as to indicate any characteristics other than those mentioned above.

Table 6 contains percentages of respondents for each of the predominant characteristics of multiparticipants compared to the SPPA sample for each year, non-participants for each year and the non-institutionalized adult population of the United States for 1981 and 1991.

From Table 6, one may notice three major themes. First, there are significant differences between the percentage of multiparticipants and the percentage of the general SPPA sample that fall within demographic groups normally associated with higher arts participation. Greater percentages of multiparticipants are older, have higher incomes and higher educations. In any survey year, there are no significant differences between the percentage of white multiparticipants and the percentage of whites in the general SPPA.

Second, *trends* among the characteristics of multiparticipants are similar to trends among the characteristics of the general SPPA sample, non-participants and the general population. That is, within each of these groups of people, the ten years between the 1982 and 1992 surveys has resulted in smaller percentage of whites, but greater percentages of households with incomes over 20 thousand dollars, individuals over 40 years old and individuals with college degrees. Interestingly, the changes in racial composition, income, age, and education witnessed in the SPPA sample and among multiparticipants and nonparticipants are not as pronounced in the general U.S. population.

Third, there is what can be described as "age creep" occurring among arts participants generally and among multiparticipants. Age creep can be defined as a growing percentage of arts participants over the age of 40 years. The cause of age creep is the movement of arts participants into older age groups without the concurrent incorporation of younger participants in sufficient numbers to influence the average age of audiences.

Age creep can largely be explained by the aging of the baby boom along with the minimal population impact of the generation following baby boomers. But, as Table 6 indicates, between 1981 and 1991 there was only a three percentage point increase in the percentage of the U.S. population over 40 years old while the SPPA sample and SPPA multiparticipants experienced 13 and nine percentage point increases in respondents over 40 years old between 1982 and 1992.

In 1982, the median age of the average multiparticipant was 44 years. By 1992, this median age had risen to 47 years. Since multiparticipants are precisely those types of arts customers that keep the doors of organizations open, this rising median age of multiparticipants mean that recruitment efforts of arts organizations must target younger arts consumers without sacrificing the appeal of their programs to an increasingly older core group of patrons.

Demographic Characteristics Among the Types of Paired Activities

Although the predominant characteristics of multiparticipants reported in Table 6 are largely ubiquitous across all the associated pairs of activities we have highlighted, there are enough variations among the *types* of activities, and among the pairs of variables within each type to warrant separate discussions of them.

Involvement in Jazz. The pairs of activities that concern involvement in jazz are the most unlike the other types of activities indicated by associated pairs of variables. While jazz multiparticipants would still be called affluent, they are the only group of that contains significant proportions of minorities, and smaller proportions of: female respondents, respondents over 40 years old, those who hold college degrees and those who earn household incomes over 20 thousand dollars. Jazz multiparticipants are no more likely than other multiparticipants to live in or near urban areas.

The difference in racial composition of jazz multiparticipants and other types of multiparticipants is significant. Average minority multiparticipation for arts activities besides jazz is 15 percent, while for the four pairs of associated jazz activities, minority participation averages 30 percent (23 percent of this is attributable to Black respondents).

The difference between jazz multiparticipants and other types of multiparticipants is only slightly less significant for sociodemographic considerations such as income, college education and age. On average, across the three years of SPPA surveys, 66 percent of jazz multiparticipants hold college degrees compared to 74 percent of classical multiparticipants and 72 percent of opera mutiparticipants. The 68 percent of jazz multiparticipants with household incomes over 20 thousand dollars is slightly less than the 75 percent of classical multiparticipants and the 73 percent of opera multiparticipants.

The age creep we noted among all arts multiparticipants is most evident among the jazz pairings. Between 1982 and 1992, the proportion of jazz multiparticipants over 40 years old has risen from 30 percent to 50 percent. Perhaps the popularization of music types such as Rap and Reggae in the mid 1980 significantly reduced the likelihood of participation in jazz by young black Americans, and accounts for this shift of average age among multiple jazz participants.

Specific Jazz Activity Pairings. Participants in the four pairs of strongly correlated jazz activities share similar demographic characteristics. Among all four pairs, between one-half and three-fourths of the participants are white and college educated. Between 79 percent and 90 percent of jazz multiparticipants live in urban areas while about half are female and half are male.

The strong age creep generally found in jazz multiparticipation is evident in each pair of jazz activities. The largest change in percent of participants over 40 years old occurs among those participating in jazz recordings and live jazz events. In 1982, only 27 percent of participants in these

activities were over 40, while in 1992 this percentage increased to 57 percent.

Other demographic changes affecting participants in all four pairs of jazz activities include an increasing proportion of participants with household incomes over 20 thousand dollars, increasing percentage of college graduates and increasing proportion of urban dwellers.

The increase in proportion of participants with incomes over 20 thousand dollars may be largely due to inflationary forces, but the change in percentage of college graduates and urban dwellers is probably directly attributable to increasing multiparticipation by minorities in jazz activities. Members of minority groups are more likely to live in urban areas and, during the past ten years, have had the fastest rate of increase in education.

Involvement in Live Plays and Musicals. As we noted in chapter two, there is only one pair of activities that concern multiparticipation in live plays and musicals. Multiparticipants in these activities exemplify the characteristics we described as most common among the average multiparticipant. Specifically, multiparticipants in live plays and musicals are least likely to be members of minority groups. Across the three years of surveys, whites average 90 percent of multiparticipants in these activities.

Aside from racial composition, multiparticipants in live plays and musicals have higher memberships in the groups we listed in Table 6 as characteristic of average multiparticipants. In comparison to the average multiparticipant, multiparticipants in live plays and musicals are about two-thirds female, four-fifths urban, two-thirds over 40 years old and three-fourths college educated. Aside the higher percentages of whites, the percentages of female and college educated multiparticipants in live plays and musicals are significantly higher than average.

Not surprisingly, age creep among multiparticipants in live plays and musicals is very noticeable. In 1982, 51 percent were over 40 years old. This percentage increased to 67 percent by the 1992 survey. As in other arts activities, age creep among these multiparticipants is primarily due to the aging of the cohort that enjoys these artforms without a concurrent recruitment of younger audiences.

Watching Traditional European Artforms. There is surprising demographic stability across the three surveys among those pairs of activities that concern watching traditional European artforms. Like all other multiparticipants, these multiparticipants are predominantly white, female, over 40 years old, college educated, living in or near cities and with household incomes over 20 thousand dollars.

However, there are a few trends among these respondents that distinguish them from other multiparticipants. First, there is a marked increase across time in the percentage of college graduates among these multiparticipants. On average, college graduates among this group increased from 60 percent in 1982 to 68 percent in 1992.

Second, age creep is not as pronounced among "watching" multiparticipants as it is among other types. While there is an increase in the proportion of multiparticipants over 40 years old in many of the pairs of activities that concern watching European artforms, on average this increase is only six percentage points between 1982 and 1992, and is much smaller than the age creep among other types of crossover activities. A few pairs (those that involve watching dance and/or watching opera) have no significant increase in percentages of participants over 40 years old.

Third, most of the pairs of activities concerned with watching European artforms exhibit significant increases between 1982 and 1992 in participation by Blacks. On average, Black participation in this type of activities increased from 6 percent in 1982 to 10 percent in 1992. More specifically, those pairs of activities that include watching dance, watching opera or watching musicals experienced increases between 3 percent and 5 percent in Black participation by 1992.

Specific Pairings Among Watchers of European Artforms. Among the specific pairs that compose this type of multiparticipation, there are two interesting findings. First, demographic characteristics of multiparticipants in watching classical music and watching opera, or watching classical music and watching musicals, are the most steady across the three survey years. Only when activities such as watching dance and/or watching opera are paired with watching classical music do demographic characteristics begin to change across the years. In effect, watching dance and/or watching plays combined with watching classical tends to increase the likelihood of minority participation and slow age creep.

Second, the manner in which the inclusion of watching opera, watching musicals and watching dance in pairing with other activities tends to increase minority participation is interesting given the small amount of minority participation in live opera and live musicals. However, as other analyses of SPPA data have shown, minority audiences are not uninterested in what are considered European artforms. In fact, minority participation in these artforms through media is increasing faster than white participation - a fact that is no doubt responsible for much of the increase in minority participation in

many pairings when the European artforms watching opera and musicals are included.

Involvement in Classical Music. Demographic changes among participants in those pairs of arts activities involving classical music is related to the aging of the cohort of multiparticipants. As a group across the survey years, multiparticipants involved in classical music show great stability in racial composition and education level. The only changes occurring among these multiparticipants are the expected age creep and an associated rise in income that normally follows aging.

Specifically, there is a ten percentage point increase in classical music multiparticipants over 40 years old between 1982 and 1992 (from 57 percent to 67 percent). This change is much less than that seen in the general population, higher than the age creep found among most arts multiparticipants through media, and lower than the age creep among attenders of multiple live arts events.

The percentage increase in classical music multiparticipants with household incomes over 20 thousand dollars is greater than income increases found among most other types of multiparticipants. Between 1982 and 1992, the percentage of classical music multiparticipants with incomes over 20 thousand dollars rose by eight percentage points (from 73 percent to 81 percent). This rate of increase is faster than that found among the general population and among the average SPPA multiparticipant.

Specific Pairings Among Classical Music Multiparticipants. Demographic characteristics of participants in specific parings of arts activities grouped under classical music multiparticipation are largely similar to what we noted about the group as a whole. Across the three years, participants in each pair of classical music activities are consistently white, female and urban with growing percentages of members over 40 years and with incomes over 20 thousand dollars.

However, there are a few findings among the specific parings that are worth noting. First, age creep is most noticeable among participants in classical music tapes and classical music on radio. Between 1982 and 1992, the percentage of these multiparticipants over 40 years increased by 15 percentage points. Interestingly, other classical music activities paired with listening to classical music recordings also experienced age creep of at least 10 percentage points between 1982 and 1992.

Second, age creep is smallest among those participants involved in classical music on the radio and watching classical

music. There was no age creep within this group between 1982 and 1985, and only a five percentage point shift in percent over 40 years old between 1985 and 1992.

Involvement in Opera and Related Activities. As we noted in chapter two, this type of multiparticipation primarily consists of participation in opera through media sources, along with other arts activities that are related to opera in terms of genre.

Overall the demographics of opera multiparticipants are similar to those of other multiparticipants, with a few interesting differences. First, age creep is not severe among opera multiparticipants. Between 1982 and 1992, the percentage of multiparticipants above 40 years old increased by only eight percentage points (from 67 percent to 75 percent).

Second, the increased in minorities found among most types of multiparticipation is not as evident among opera multiparticipants. The percentage of whites among opera multiparticipants decreased by only six percentage points between 1982 and 1992 (from 88 percent to 82 percent).

Perhaps reflecting their already high incomes and education levels, changes in income and education are also very moderate among opera multiparticipants. Between 1982 and 1992, the percentage of opera multiparticipants with household incomes over 20 thousand dollars increased by only nine percentage points. The percent of these same respondents with college educations increased by only 10 percentage points.

Specific Pairings Among Opera Participants. The seven arts activity pairings grouped under this type of multiparticipation are generally similar with participants that are white, female, college educated urban dwellers with increasing incomes and ages. However, the demographic characteristics of some of these pairings deserve noting.

Among participants in opera through recordings and musicals through recordings, there are both the highest proportion of minorities among opera multiparticipants and no age creep. These two trends are, perhaps, related that in order to avoid age creep across a ten year period, new participants in these activities would have to be included and these new participants could be drawn from minority populations. A crosstabulation of this arts activity pairing by minority participants by age indicates that the rise in minority participants does indeed mean the inclusion of younger participants and is at least part of the reason for a lack of age creep.

Among participants in opera through recordings and opera experienced on television or video, there are demographic shifts uncharacteristic of multiparticipants of any type. The

percentage of these types of participants over the age of 40 increased by 17 percentage points between 1982 and 1985, but decreased by 11 percentage points between 1985 and 1992. Percentages of these types of multiparticipants with incomes over 20 thousand dollars showed a reverse trend. That is, between 1982 and 1985, percentages of participants with incomes over 20 thousand dollars decreased by 14 percentage points, and increased by 17 percentage points between 1985 and 1992.

Given the fact that age and income figures for 1982 and 1992 are similar for participants in opera through recordings and opera on television, one is tempted to conclude that differences in the 1985 sample are the cause of these uncharacteristic shifts. However, the 1985 sample is used for all our pairings of strongly correlated arts activities and this pairing is the only one where these strange shifts occur. We can only conclude that for this combination of activities, the 1985 data is "unusual" and the age and income figures from 1982 and 1992 are more indicative of the demographic characteristics of these multiparticipants.

Activities New in the 1992 Survey. As was noted in chapter two, there are three strongly correlated arts activities that were only measured in the 1992 SPPA survey. These pairings are (1) visiting parks and art museums; (2) visiting parks and art fairs; and (3) reading novels and reading books. Since these pairings cannot be grouped by discipline or source of participation, we will discuss the demographic characteristics of each of them separately. Since questions about these activities were asked only in the 1992 survey, there is no trend data concerning the characteristics of these multiparticipants.

Like all other types of multiparticipants, visitors to parks and art museums are predominantly white, female, over 40 years old college educated, living in or near cities with household incomes over 20 thousand dollars. Visitors to parks/art museums do tend to be younger (41 percent are aged 39 and under) than the average multiparticipant, but other characteristics are very similar to the averages listed in Table 6.

Visitors to parks and art fairs are also more likely than the average multiparticipant to be aged 39 years or younger. (40 percent). Again, however, other demographic characteristics are very similar to average multiparticipant characteristics.

Readers of novels and books are not likely to be younger than the average multiparticipant. Their demographics are so close to the average for all multiparticipants that differences are not worth mentioning. This is due, no doubt, to the large number of people who read both novels and books. As we noted in chapter two, this pairing of activities has the highest correlation coefficient and the largest number of participants

among all the activities listed in the three years of SPPA surveys.

TABLE 6: PREDOMINANT CHARACTERISTICS OF MULTIPARTICIPANTS COMPARED TO OTHER GROUPS (%)

CHARACTERISTICS	SPPA MULTIPARTICIPANTS			SPPA SAMPLE			SPPA NONPARTICIPANTS			U.S. POPULATION	
	1982	1985	1992	1982	1985	1992	1982	1985	1992	1980	1991
WHITE	85	82	81	82	81	77	76	NA	68	86	84
INCOME > 20K	72	64	78	58	52	65	37	NA	43	57	58
AGE > 40 YRS	59	69	68	50	62	63	61	NA	68	36	39
URBAN	82	86	84	67	68	78	56	NA	75	74	75
COLLEGE DEGREE	64	70	72	38	40	45	13	NA	16	16	22
FEMALE	55	30	55	53	24	52	45	NA	47	51	51

CHAPTER FOUR: PATTERNS OF MULTIPARTICIPATION AMONG ALL ARTS ACTIVITIES

Thus far in this monograph we have discussed multiparticipation in the arts in terms of those activities that are strongly associated as indicated by correlation coefficients higher than .4000. However, in order to fully understand multiple arts participation as indicated by SPPA data, we need to investigate the relationships among all core arts activities. In this chapter we will analyze interrelationships among all core activities listed in the three SPPA surveys by using cluster and factor analyses.

Cluster Analysis. Cluster analysis is a method of measuring similarities among variables that employs many different methods for combining clusters and calculating similarities. Cluster analysis can be used to group characteristics of variables, or used to group collections of discrete variables. In our analysis, we employ cluster analysis to group similar core arts activities. Our unit of analysis is the 25 to 32 single arts participation variables found in each SPPA survey. Our method of measuring similarity is the *average linkage method.*

Average linkage method begins with an analysis of a correlation coefficient matrix produced by Pearson's r. These are the same coefficients reported in Table 2. Measurement of similarity among arts activities is done in reference to the absolute value of the correlation coefficient of each pair of variables. The formation of clusters of variables is *agglomerative* in that clusters are formed by grouping cases into bigger and bigger clusters until all cases are members of a single cluster - the cluster of SPPA core variables. Average linkage method defines the distance between two clusters as the average of the distances between all pairs of cases in which one member of the pair is from each of the clusters.

Because of the way cluster analysis calculates similarities, many of the clusters formed will be similar to the strongly correlated pairs of variables we discussed in chapters 2 and 3. But, because cluster analysis concerns all core variables, our analysis can indicate relationships among arts activities that are not evident in simple pairings.

Cluster analysis informs our consideration of multiple arts participation by segmenting the many possible levels of activity groupings, and indicating the specific arts activities within each grouping. These clusters are the constellations of activities in which individuals cross-participate.

Factor Analysis. Factor analysis is a statistical technique used to identify a small number of factors that can be used to represent relationships among sets of variables. These explanatory factors are based on interpretation of combinations of variables present in the data. The factors are not normally variables in the data set, but inferred from how existing variables are combined. For example, in surveys about perceptions of soft drinks, respondents sometimes rate drinks in terms of carbonation, sweetness, tartness, cost and container size. A factor analysis that produced a combination of the variables describing carbonation, sweetness and tartness could be interpreted to be the *taste factor* in perceptions of soft drinks. A combination of variables describing cost and container size could be interpreted as the *value factor* in perceptions of soft drinks.

For our analysis of core SPPA arts activities, factor analysis will group those activities that are related in terms of participation. These groupings should be similar to those produced by our cluster analysis, and will allow us to test the results of our cluster procedure. Another purpose of factor analysis is to determine how many groupings of arts activities can adequately describe SPPA core activity data. Cluster analysis can indicate the groups of similar activities contained in the data, and to some extent it can indicate which groupings contain highly related activities as opposed to groupings with activities related only on the general level. Factor analysis goes one step beyond this by precisely indicating how many factors, or groups of arts activities, can describe much of the crossover participation found in SPPA data.

Just as cluster analysis assists in our understanding of multiple arts participation by segmenting the many possible levels of activity groupings, and indicating the specific arts activities within each grouping, factor analysis allows us to describe the entire phenomenon of crossover arts participation by developing those few conceptual categories in which all multiparticipation occurs.

Cluster Analysis of 1982, 1985 and 1992 Core Activities

Figures 1, 2 and 3, and Tables 7, 8 and 9 report the results of cluster analysis on 1982, 1985 and 1992 SPPA core activity data. In Figures 1, 2 and 3, the vertical "icicles" are part of the output of the statistical package performing the cluster analysis and require some explanation.

The lines or icicles extending from the variable names indicate combinations of related arts activities. These icicle plots are read from the bottom up with those clusters forming at the bottom containing the more strongly related arts activities. The strongest clusters normally consist of two variables and add other activities as they "progress" up the icicle plot. Adding variables makes the cluster less significant in the sense that adding new activities makes the similarities among activities more general.

For example, in Figure 1, the very strong cluster consisting of listening to classical music on recordings and listening to classical music on the radio represents two activities that are so interrelated that participants in one are normally participate in the other. As one progresses up the plot and this simple cluster becomes part of another cluster that includes these two variables and the activities of watching dance, opera and classical music on television, the interrelationships among the variables become less strong. The new cluster of listening to classical music on recordings or the radio along with watching dance, opera and classical music is not as interrelated in the sense that engaging in any one of these is not as connected to engaging in the others. Similarities in the activities measured as a function of participation are not as obvious as the similarities between listening to classical music on recordings and the radio.

This dilution of the relationships among variables continues as one progress up the icicle plot to the point that the only relationship among all the variables in the final cluster is that they are on the same survey.

Tables 7, 8 and 9 contain the same data as the icicle plots but we have transcribed the clusters to better show the relationships among variables. In these tables, clusters on the left of the page are less significant than those to the middle and right of the page. In reverse of the manner in which clusters are displayed in the icicle plots, these tables show how the general clusters devolve into smaller and more closely related clusters.

The boxes around sets of activities indicate clusters. As one moves from left to right, activities are dropped from clusters while the remaining activities usually become more

similar in discipline or venue. This display of how clusters are winnowed into smaller and more significant groupings further substantiates our contention that meaningful crossover participation occurs in activities that are related in terms of discipline or venue, with very little significant multiparticipation occurring across vastly different artforms.

General Findings Across the Survey Years. It is important to restate the manner clusters should be interpreted. That is, the similarity of activities included in a cluster is determined from all of the activities found there. Hence, the more activities included in a cluster, the more general the similarity among them. When inspecting a cluster of variables for similarity, it is less important to link similar single variables within the grouping than it is to understand the overall similarity of all variables included. For example, the cluster mentioned above that includes listening to classical music on the radio and on recordings as well as watching dance, opera and classical music must be interpreted for what is similar among all variables. It is tempting to focus on those that are obviously related, such as the variables concerning classical music, but this would misunderstand the real similarity of activities in this cluster. The real similarity in this cluster is more general, having to do with the similarities of the venue (passive participation as listening and watching), and similarities in artform (interest in major traditional disciplines).

Across the three survey years, the structure of the survey instruments results in similarities among clustered SPPA activities as mixtures of related venues and/or disciplines. Clusters based on venue means that the relationship among activities is best characterized by where they are enjoyed. Clusters based on discipline means that the relationship among activities is best characterized by the content of the artform. In most clusters formed from core variables, venue and artform are both considerations of similarity. Only in those clusters that contain two activities do either venue or discipline serve as the main point of similarity.

From Tables 7, 8 and 9 one can see that, at the most general level, there are similar clusters in each of the three SPPA survey years. In all three years there are clusters of activities related by (1) an interest in jazz; and (2) participation in the arts through media. In 1982 and 1992, there is also a cluster of activities that seem to be related by a preference for visiting and/or attending arts events. In 1985, this visitor/attender cluster is broken into two separate clusters with no connection among the variables across the separate clusters. In 1992, the addition of new variables creates a general cluster that can best be described as an interest in some literary activities.

These very general clusters corroborate two of the types of correlated variables discussed in chapter two (involvement in jazz and participation through media). However, activities in these clusters are related in only the most general manner. It is necessary for us to take the next step and ask how these general clusters devolve into more significant and smaller groupings of activities. An analysis of this devolution across the three survey years can indicate considerations for how arts activities are related through participation.

The manner in which more specific clusters form, and how activities are dropped, indicate the character of the similarity among the activities that remain in each level of clusters. As we noted, these characteristics usually involve varying combinations of venue and discipline considerations. In most clusters, venue and discipline are both measures of similarity until one arrives at the smallest groupings. It is at this point that either commonality in venue or discipline becomes the single measure of similarity in activities.

The Logic of Cluster Devolution. The manner in which more general clusters devolve into more specific groupings indicates how we should regard the relationships indicated by cluster analysis. That is, while general clusters of activities are instructive for what they tell us about the general connections among artforms and venues, it is the more specific clusters that indicate *why* certain arts activities are related. As we noted, because SPPA surveys ask about discipline-based activities placed within specific types of venues, clustering normally involves differing associations of venue and discipline. The logic of devolution is the same across all three years because of the structural similarity among the survey instruments.

Arts activities are related in terms of discipline or venue or combinations of both. In order to understand the relationships among artforms, we must consider how venue and discipline determine a cluster or how the interactions between the factors of discipline and venue result in grouped activities. In order to do this, we will discuss devolution in terms of the general clusters found among core data from the three surveys.

For the activities concerning *involvement in jazz*, the similarity among activities in the most general cluster is clearly an interest in jazz as an artform. Venue is not as important because attendance at live jazz is just as significant in this cluster as listening to jazz on the radio or recordings.

However, when this general cluster breaks into two more significant clusters, the influence of venue is noticeable. That is, in 1982 and 1985, jazz on the radio and jazz on recordings

are closely related and indicate an interest in jazz *through* media formats. Similarly, live jazz and watching jazz combine to form a cluster based on *witnessing* jazz. One can see that in this devolution of clusters, watching jazz becomes less of a media experience and is more closely related to live attendance.

In the 1992 survey, devolution of the general jazz cluster is different. Considerations of venue play a more important role in formation of the specific clusters because live jazz is dropped leaving watching jazz nothing with which to cluster. The strongest association occurs between the two listening jazz activities. Given the increase between 1982 and 1992 in media participation in all arts activities, this different devolution in the 1992 cluster is not surprising.

For the activities concerning *participation in the arts through media,* the similarity among activities in the general cluster is largely based on experiencing the arts through non-live venues. However, there must be some cluster similarity based on discipline because the cluster *does not* contain jazz and ballet media variables.

When this general cluster breaks into more significant groupings, more specific considerations of discipline are added to similarities in venue. Specifically, one of the first breaks is of media participation in the related disciplines of musicals and opera. Similarly, commonalities based on venue and discipline are evident in clusters that contain activities such as watching musicals and watching plays, but do not contain the activities of listening to musicals or plays. In such clusters, the factor of watching is as important as similarity in discipline.

For the activities *concerning those who visit or attend arts events,* the measure of similarity in the general cluster can best be described as a common interest in active engagement. This is not the case, however, in the 1985 data. In 1985, this cluster is broken into two specific clusters where one is related by an interest in engagement and discipline (live plays and live musicals), and the other is related largely by an interest in active engagement (attending art fairs and reading poetry).

When this general cluster devolves into more significant clusters, two trends are discernible. First, activities added in the 1992 survey clearly are grouped together because of their similarity in both venue and discipline (read novels and read books). Second, the cluster of visiting parks and art museums is largely related by the act of visiting, and less by similarities between parks and arts museums. The cluster that contains live attendance at plays, musicals and classical music concerts are clearly related in terms of venue (live) and discipline (traditional art forms). The only surprising fact about this

cluster is that in none of the three years is ballet included.

For those *activities added in the 1992 survey*, variables included in the most general cluster are clearly similar in terms of discipline (literature activities). Only when this cluster breaks into two more significant clusters do considerations of venue become more obvious. The fact that listening to poetry and reading poetry are not in the same cluster indicates that, in this group of activities, consideration of listening versus reading is more important that what is being heard or read.

Factor Analysis of 1982, 1985 and 1992 Core Activities

Tables 10, 11 and 12 contain the results of a factor analysis of 1982, 1985 and 1992 SPPA core activities. Each table contains a list of core variables and their associated coefficients for each factor generated. Coefficients may be interpreted in the same manner as those produced through Pearson's r. That is, variables with coefficients of at least .4000 are strongly associated and form the basis for defining the factor in which they appear. In fact, factors may be described as what is common to the group of variables that are strongly associated. For example, in Table 10, Factor 1 is best described as the shared characteristics of all strongly associated variables listed underneath it. As the table indicates, these are the variables that emphasize watching the arts. Therefore, this factor can best be described as "arts watchers."

In some sense, the factor of "arts watchers" represents a categorical description of data much like a variable. Just as a data set can be partially described in terms of the percentages of respondents engaging in an activity, factor analysis allows us to group strongly associated variables into categories that inform a description of the entire data set.

Factor analysis is instructive to our investigation of multiparticipation because it allows a description of the entire phenomenon of crossover arts participation with just a few conceptual categories. As we argued at the beginning of this monograph, while crossover participation occurs among a wide variety of disciplines and venues, it should only be investigated when significant numbers of people participate in two or more activities so as to indicate a relationship among the activities. Factors generated from factor analysis indicate the categories within which significant multiparticipation occurs.

General Findings Across the Survey Years. As Tables 10, 11 and 12 indicate, 1982 and 1985 SPPA participation data can best be described by five factors, while the new variables added to 1992 data means results in the formation of two additional factors.

Across the three surveys, there are four factors in common. In 1982 and 1992 these are: (1) those who participate by viewing arts events (watchers); (2) those who attend live arts events (attenders); (3) those who participate by listening to the arts (listeners); and (4) those who participate in jazz (jazzers). In 1985, there are only two factors in common with the 1982 and 1992 surveys. These are: (1) those who participate by viewing arts events (watchers) and (2) those who participate in jazz (jazzers). In the following pages, we will investigate each of these categories.

Watchers. Across the three survey years, "watchers" are those individuals that participate in the arts by way of television or videotapes. As Tables 10, 11 and 12 indicate, the activities of watching classical music, watching opera, watching musicals, watching plays, watching dance and watching art programs are so strongly correlated that participation in one is a good indicator of participation in the others. Although watching jazz is not included in this grouping, together these activities indicate that the ability to watch the arts on television or video is a substantial consideration in decisions to participate or multiparticipate in the arts.

Attenders. Attenders are those individuals that are most likely to participate in the arts through live performances or exhibits. The combinations of activities that define this factor change across the three survey years. In 1982, attenders are those that attend live classical concerts, musicals, plays, art museums and art fairs. In 1992, the definition of this factor is expanded to also include attenders of live ballet and live dance.

Listeners. Listeners are those individuals that participate in the arts through radio or recordings. However, it is important to note that in our factor results, this group does not include listening to jazz on the radio or recordings. Hence, the dominant similarity of listening is tempered somewhat by considerations of discipline. As we will see, jazz variables are so strongly associated, that they rarely become parts of other factors.

In 1982 and 1992, the factor of listeners always includes those who listen to classical music on recording and radio, and those who listen to opera on recording and radio. Despite the similarity of variables across this factor, there are some differences between the years. In 1982, those who listen to musicals on radio are part of this factor, while in 1992 listeners of musicals on recordings and listening to plays on radio are included.

Jazzers. All of the variables concerning jazz are usually

grouped together in a strongly correlated factor. A common interest in jazz serves to make this factor the only one that is exclusively based on considerations of discipline and not venue. The association of live jazz with jazz experienced on media is as strong as the associations among the media jazz variables.

Other Factors. Although the four factors described above are the main conceptual participation groups found in SPPA data, each survey year contains one to three additional factors. In 1982, a fifth factor that combines attenders of live opera and live ballet is evident. This factor could be interpreted as a similar interest in "high or fine art."

In other analyses of SPPA data, the unusual nature of 1985 data has been observed, and the results of our factor analysis reaffirms this observation. In 1985, there are three factors that are not found in 1982 or 1992. Table 11 indicates that a strong explanatory factor in the 1985 data consists of the activities of listening to opera on radio, on recordings and attending live opera. Hence, this factor can best be termed "opera participants."

The fourth factor in 1985 data combines readers of poetry and attenders of art fairs and art museums. For lack of a better term, this factor could be called "choosers" in order to describe those who enjoy the arts on their own terms given that attending art fairs, art museums and reading poetry allow some selection within the course of the arts experience.

The fifth factor found in 1985 data combines the activities of attending live musicals and plays, and listening to musicals on the radio and classical music on recordings. Despite the presence of the classical music variable, this factor can best be defined as an interest in arts events presented on stage.

There is a fifth factor in 1992 that deserves further attention. In this year, the addition of new variables produces a factor that combines visitors to art fairs, visitors to parks, readers of books and readers of novels. Because of the strength of the correlation between reading books and reading novels, one could call this factor "readers." However, the interplay of all strong variables in a factor is what drives its definition, and the other two activities cannot be ignored. Visitors to art fairs and parks are similar to reading in that all of these types of arts participation involve active engagement. Interpretation of this factor can, then, be specific to reading and include only the two reading variables, or take a larger view and regard this factor as indicative of the more abstract concept of engagement in the arts.

The sixth and seventh factors found in the 1992 data are more minor groupings. The sixth factor combines readers of plays

and poetry, and listeners of poetry and readings. The seventh factor combines radio listeners of musicals and plays.

What Factors Tell Us about Multiple Arts Participation

As we noted at the beginning of this chapter, factor analysis allows us to determine a few conceptual categories within which arts participation occurs. The five factors found in 1982 and 1985, and the seven factors found in 1992, are instructive to our understanding of multiple arts participation because these factors describe themes or concerns that are the major considerations in individuals' decisions to participate in more than one arts activity.

As we noted in our discussion of clusters, these themes or considerations are usually related to differences in discipline and venue. For example, the factor of "watchers" tells us that in all three data sets, watching the arts is such an important way people experience the arts that any consideration of how to increase participation, or encourage cross participation must include the role of television and videotapes. It also tells us that the medium of television or videotapes is a major way in which individuals participate in more than one arts activity, and that sometimes, the content of the arts activity is not as important in decisions to cross- participate as is the activity's availability on television or videotapes.

Different Importance of Factors. The five factors produced by 1982 and 1985 data, and the seven factors produced by 1992 data, are not all equal in how they describe their respective databases. Table 13 contains the Eigenvalues and percentage of total variance accounted for by each factor in each survey year. Eigenvalues represent the total variance explained by each factor. The percentage of total variance attributable to each factor's Eigenvalue is listed to the right. As an illustration of these two statistics, the variables comprising factor two in 1982 have an Eigenvalue or variance of 1.7. This variance represents 7.1 percent of the total variance of all 25 activities analyzed in this procedure.

As the table indicates, the five factors for 1982 and 1985, and the seven factors for 1992, account for about half of the variance contained in each year's data set. The table also shows the strength of the first factor in all three years - "watchers." This factor accounts for at least 25 percent of variance in all three survey years. This means that all the other factors combined are only as significant a description of the data as the

single "watchers" factor.

The other factors are less important than the factor of arts watchers, but they do yield information about other important consideration of participation. As we have seen in our other analyses of multiparticipation, the themes evoked by the lesser factors are similar to those in our typology of correlated variables and in many of our clustered activities. These themes of live attendance v. listening and jazz v. traditional European music are reoccurring themes in our analysis of multiparticipation, and are important to understanding the courses individuals take when they participate in more than one arts activity.

Although the factor of watchers is most significant across all three years, the relative importance of the other factors change from year to year. Table 14 contains a ranking of the five or seven factors from each data set. In the table, one can see the primary position of "watchers," and the interposition of new factors in 1985 and 1992.

The addition of new variables in the 1992 survey causes some significant changes in the importance of some factors. Eigenvalues and percent of variance accounted for by "listeners" drop in 1992. "Listeners" is the fourth factor while "attenders" remain in the second position and the new factor of "readers/active engagement" assumes the third position. The new factor also serves to push "jazzers" into fifth position, with a decline from 5.1 to 3.9 in percent of variance accounted for by this factor.

Relationships Among Factors. As we noted, factors are similar to variables in that they are a partial description of behavior recorded by a data set. Also like variable, factors may be compared to one another in order to determine associations. Correlation coefficients calculated among factors in each of the survey years indicate that these factors are only weakly related to one another. The factors are each discrete descriptions of part of each year's data set and do not share characteristics.

This low correlation among factors substantiates a major theme of this monograph. That is, crossover arts participation occurs among activities that are related in some manner. Very little multiple arts participation happens across disciplines that do not share some similarities in terms of content or venue.

FIGURE 1: 1982 CORE ARTS ACTIVITIES CLUSTERS

VERTICLE ICICLE PLOT

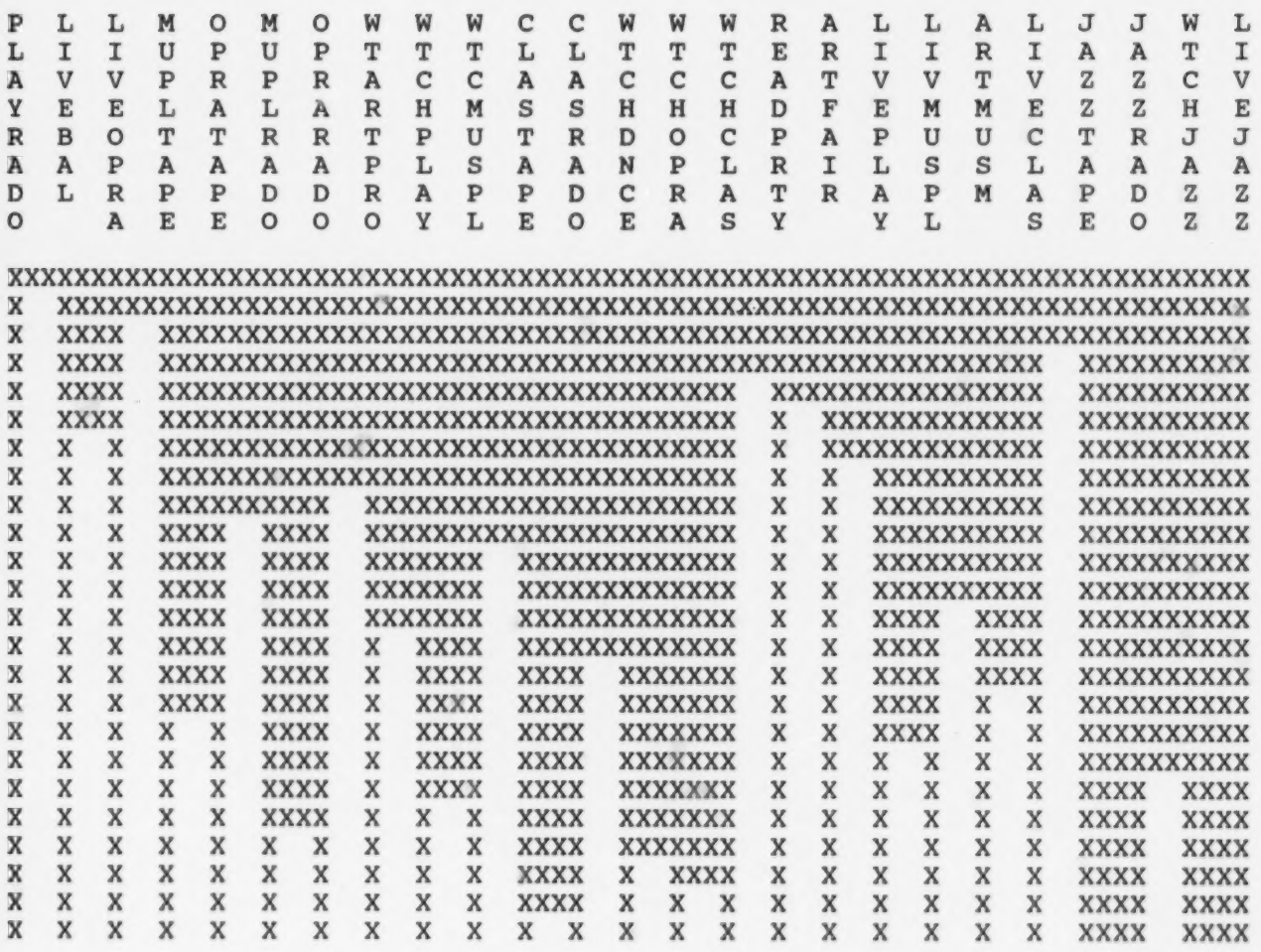

TABLE 7: CLUSTERS FORMED FROM 1982 CORE ARTS ACTIVITIES

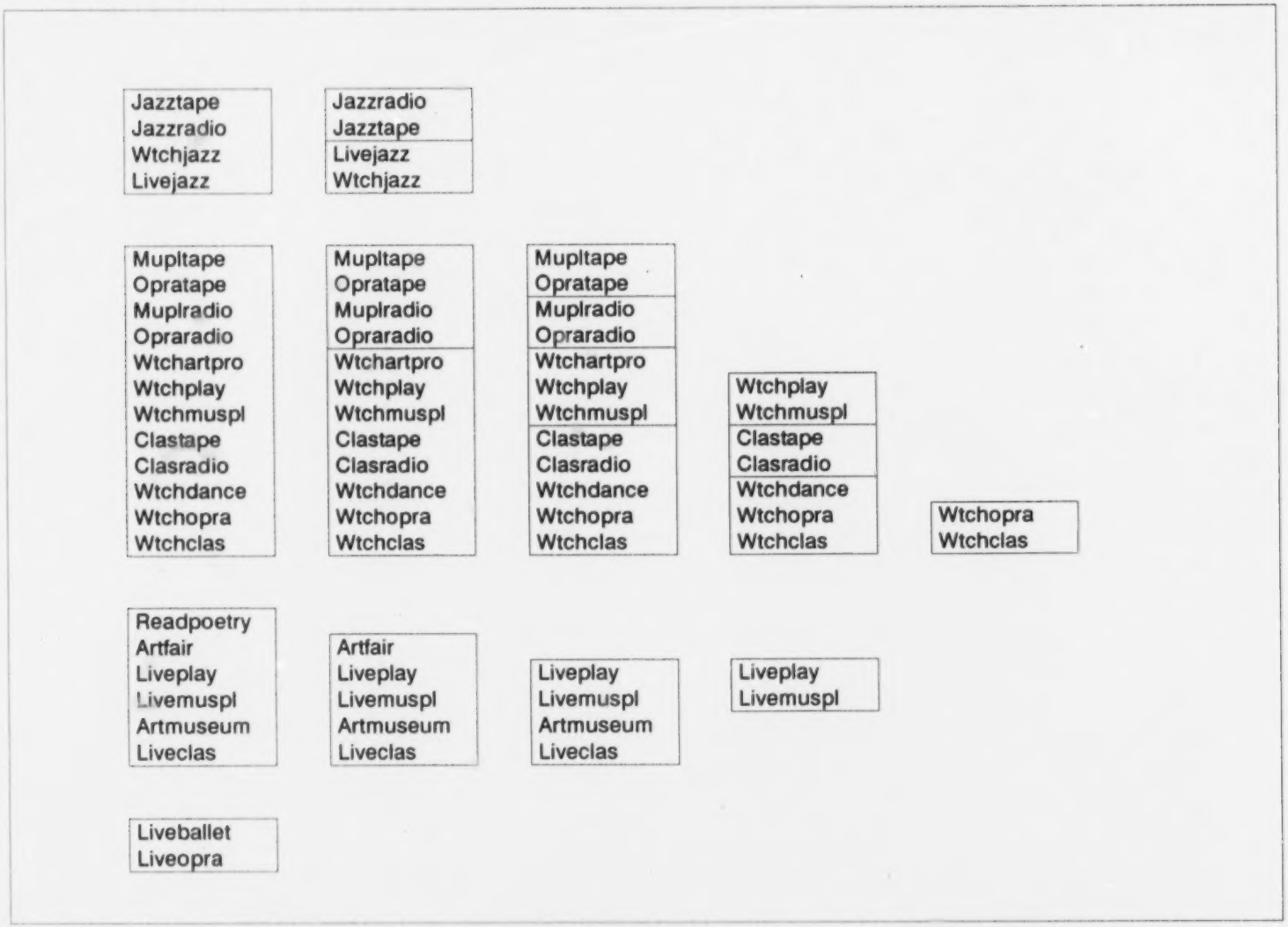

FIGURE 2: 1985 CORE ARTS ACTIVITIES CLUSTERS

VERTICLE ICICLE PLOT

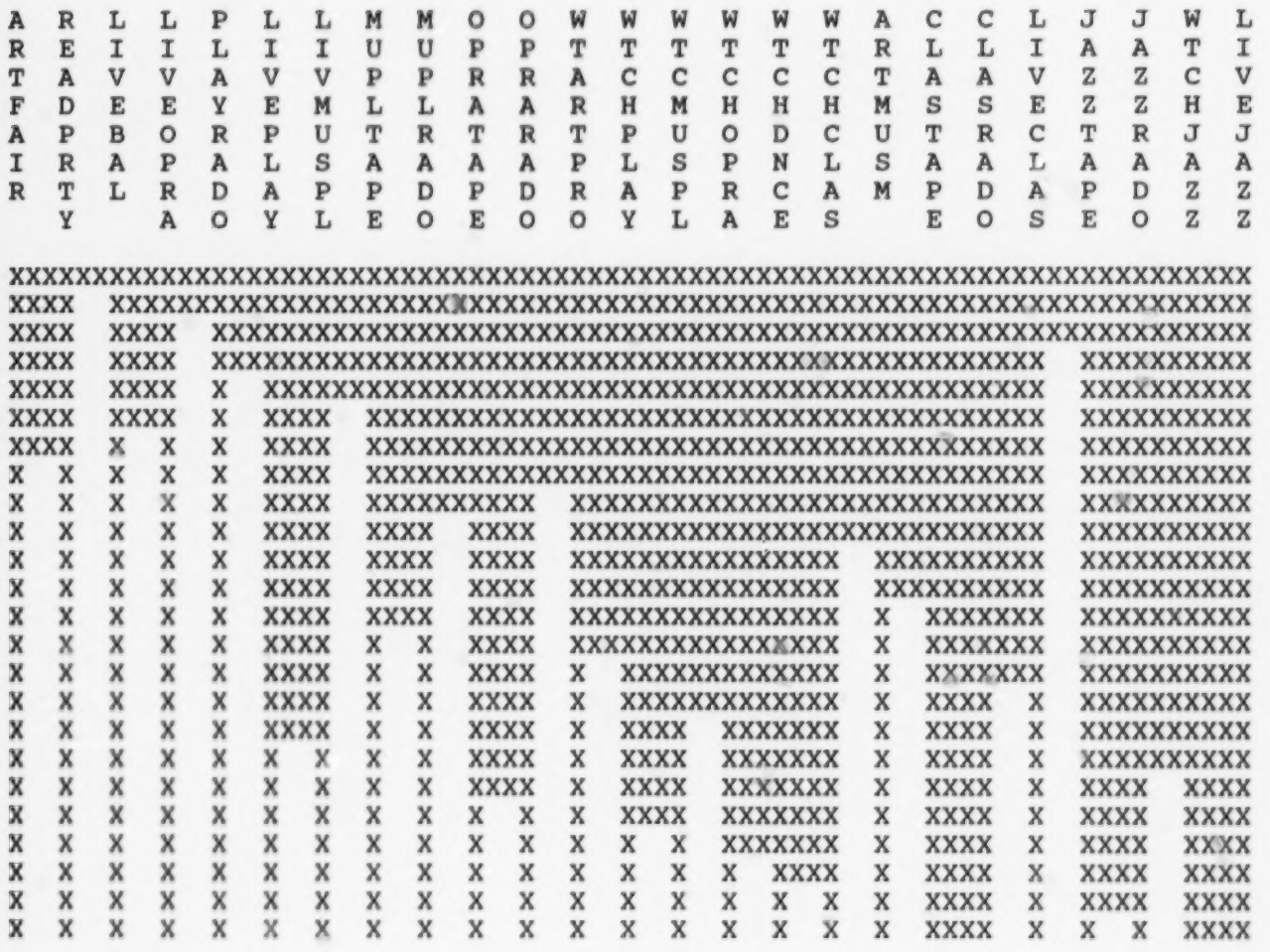

TABLE 8: CLUSTERS FORMED FROM 1985 CORE ARTS ACTIVITIES

FIGURE 3: 1992 CORE ARTS ACTIVITIES CLUSTERS

VERTICLE ICICLE PLOT

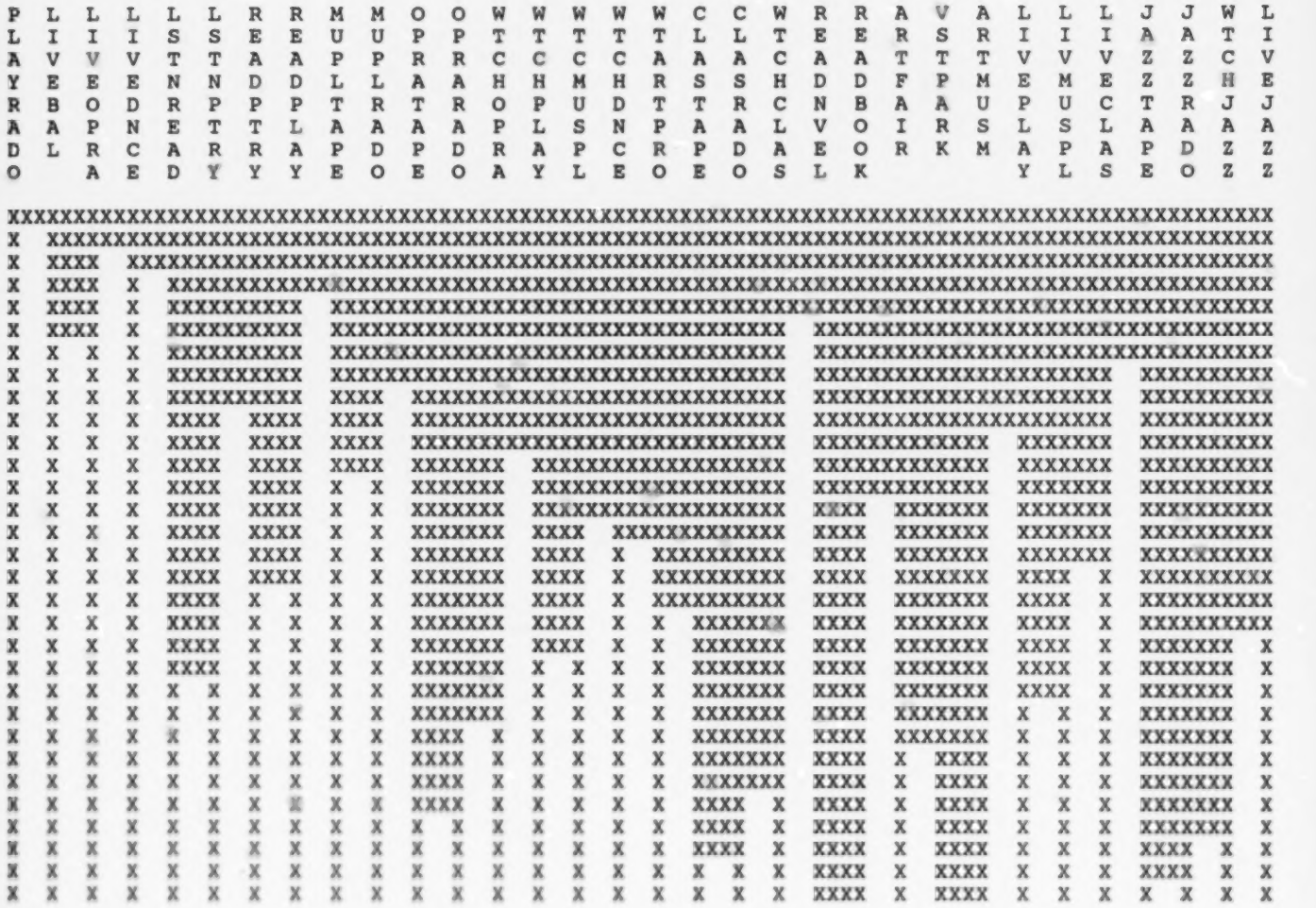

TABLE 9: CLUSTERS FORMED FROM 1992 CORE ARTS ACTIVITIES

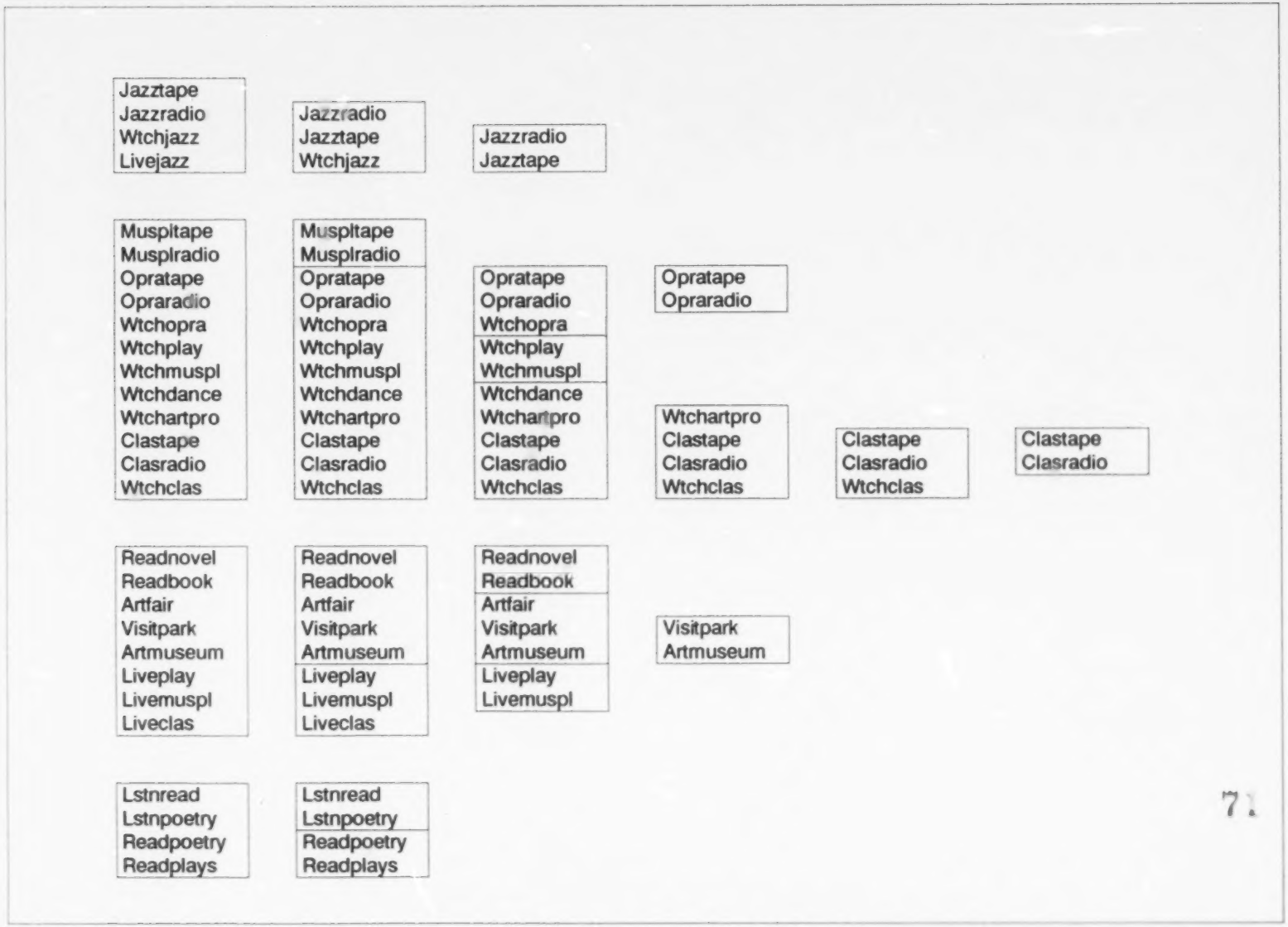

TABLE 10: FACTOR COEFFICIENTS – 1982

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	"Watchers"	"Attenders"	"Listeners"	"Jazzers"	"High Art"
LIVEJAZZ	−0.05738	0.27199	0.0196	0.64999	0.13324
LIVECLAS	0.19736	0.5155	0.24097	0.02302	0.23102
LIVEOPRA	0.0886	0.04147	0.11746	0.02946	0.6426
LIVMUSPL	0.15445	0.63714	−0.03431	0.02977	0.29547
LIVEPLAY	0.01984	0.62092	0.03837	0.12265	0.3025
LIVEBAL	0.04909	0.37289	−0.00167	0.07441	0.52067
ARTMUSM	0.20253	0.6179	0.21336	0.11291	−0.02392
READPRTY	0.24052	0.42383	0.16634	0.12481	−0.09505
ARTFAIR	0.26391	0.54474	0.05245	0.06692	−0.15932
WTCHJAZZ	0.39903	−0.01403	−0.00618	0.64396	0.02996
WTCHCLAS	0.71812	0.17552	0.17497	0.101	0.08187
WTCHOPRA	0.6686	−0.04203	0.22036	0.01842	0.22294
WTCMUSPL	0.62146	0.24109	0.03333	0.04832	0.0779
WTCHPLAY	0.53006	0.31126	0.0718	0.19142	−0.00145
WTCHDNCE	0.60434	0.16463	0.15787	0.11796	0.15252
WTARTPRO	0.54164	0.26116	0.14052	0.17107	−0.23206
JAZZRADO	0.12703	0.02723	0.16787	0.75302	−0.02047
JAZZTAPE	0.13222	0.11091	0.12415	0.79137	−0.00984
CLASRADO	0.33812	0.17272	0.55072	0.15877	0.04534
CLASTAPE	0.41053	0.30867	0.43355	0.15413	0.10853
OPRARADO	0.16859	−0.04199	0.67775	0.06054	0.25433
OPRATAPE	0.35516	0.0362	0.44479	0.01586	0.42395
MUPLRADO	0.08494	0.07273	0.70104	0.03915	0.01729
MUPLTAPE	0.25954	0.26775	0.37519	0.03054	0.28122
PLAYRADO	−0.03148	0.25374	0.49715	0.12596	−0.25533

TABLE 11: FACTOR COEFFICIENTS – 1985

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	"Watchers"	"Opera"	"Jazzers"	"Choosers"	"Stage"
LIVEJAZZ	0.00264	0.07529	0.61333	0.33728	0.07283
LIVECLAS	0.2382	0.26116	0.19337	0.47468	0.30024
LIVEOPRA	0.05043	0.63973	0.05815	0.30607	−0.06569
LIVMUSPL	0.21665	−0.03137	0.10814	0.47737	0.47073
LIVEPLAY	0.13064	0.03467	0.09916	0.47696	0.49433
LIVEBAL	0.0813	0.33364	0.1272	0.3846	0.08045
ARTMUSM	0.33431	0.15797	0.23968	0.50625	0.18411
READPRTY	−0.02044	−0.00734	−0.02618	0.6396	−0.09063
ARTFAIR	−0.06153	−0.01182	−0.01676	0.76608	−0.01464
WTCHJAZZ	0.37704	−0.00174	0.64101	−0.00272	−0.03589
WTCHCLAS	0.71505	0.18516	0.1396	0.05774	0.22107
WTCHOPRA	0.65732	0.3582	0.01754	0.03604	0.0223
WTCMUSPL	0.67292	0.04426	0.03473	0.02271	0.28892
WTCHPLAY	0.56866	0.10606	0.13282	0.09443	0.33179
WTCHDNCE	0.70473	0.2014	0.09276	0.09337	0.04876
WTARTPRO	0.67078	0.07941	0.19216	0.06438	−0.00835
JAZZRADO	0.12438	0.15085	0.77682	0.00317	0.12024
JAZZTAPE	0.09913	0.07317	0.79265	0.02245	0.16841
CLASRADO	0.41635	0.36725	0.28792	0.02798	0.34926
CLASTAPE	0.40232	0.27675	0.27114	0.01572	0.48695
OPRARADO	0.34377	0.68358	0.04087	−0.02421	0.0962
OPRATAPE	0.3014	0.53343	0.03473	−0.0188	0.31987
MUPLRADO	0.11917	0.51072	0.02944	−0.06197	0.43449
MUPLTAPE	0.16645	0.21134	0.10727	0.01214	0.7378
PLAYRADO	0.10788	0.5346	0.10727	0.02924	0.09507

TABLE 12: FACTOR COEFFICIENTS – 1992

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
	"Watchers"	"Attenders"	"Readers"	"Listeners"	"Jazzers"	"Literature"	"Plays"
LIVEJAZZ	−0.00932	0.38248	0.07267	0.00597	0.5804	0.08789	0.05106
LIVECLAS	0.15658	0.5588	0.1269	0.29511	0.12476	0.08992	−0.01048
LIVEOPRA	−0.00353	0.44144	−0.04544	0.43236	−0.01172	0.11259	−0.14973
LIVMUSPL	0.14209	0.60298	0.22175	0.10061	0.08873	−0.0086	0.08949
LIVEPLAY	0.08859	0.60359	0.17823	0.06833	0.10174	0.07453	0.13006
LIVEBAL	0.07956	0.52733	−0.03112	0.16609	0.04463	0.09861	−0.13155
LIVEDNCE	0.17925	0.45887	−0.00124	−0.09445	0.10107	0.16951	0.09273
ARTMUSM	0.19334	0.4508	0.39905	0.10433	0.20916	0.12472	0.12414
ARTFAIR	0.1959	0.33988	0.54354	−0.05353	0.10599	0.0022	0.11205
VSTPARK	0.20724	0.34909	0.48816	−0.01395	0.12475	0.06883	0.1627
READBOOK	0.09839	0.02587	0.78091	0.14206	0.10041	0.13812	−0.03334
READPLAY	0.05366	0.16709	0.07715	0.13658	0.04205	0.63479	−0.05838
READPTRY	0.22542	0.12671	0.29139	0.12654	0.10629	0.59032	−0.06917
READNVEL	0.11683	0.02832	0.77342	0.12657	0.0758	0.2044	−0.04187
LSTNPTRY	0.20098	0.10365	0.0448	0.04511	0.12788	0.66411	0.14525
LSTNREAD	0.06842	0.04817	0.13189	0.03212	0.0703	0.56424	0.36191
WTCHJAZZ	0.43888	0.0591	0.06719	0.01493	0.61765	0.11125	0.01506
WTCHCLAS	0.64311	0.13	0.19813	0.29072	0.12427	0.05051	−0.0138
WTCHOPRA	0.56031	0.0758	0.01361	0.43048	0.00885	0.1283	−0.01148
WTCMUSPL	0.60682	0.16922	0.11805	0.1539	0.05336	0.07024	0.11265
WTCHPLAY	0.56208	0.16067	0.12523	0.04145	0.0732	0.0996	0.23726
WTCHDNCE	0.63376	0.12327	0.03836	0.12467	0.13933	0.17262	0.02329
WTARTPRO	0.5446	0.11734	0.2974	0.03978	0.18334	0.11399	0.09356
JAZZRADO	0.18571	0.07229	0.14351	0.12974	0.78728	0.09158	0.05225
JAZZTAPE	0.07614	0.12179	0.14487	0.18101	0.79756	0.08158	0.06444
CLASRADO	0.35638	0.13596	0.31828	0.39899	0.27148	0.07495	0.04877
CLASTAPE	0.25171	0.17773	0.31808	0.4858	0.28356	0.09051	0.0616
OPRARADO	0.25024	0.03641	0.05747	0.66125	0.08483	0.08927	0.18764
OPRATAPE	0.14979	0.10559	0.06879	0.71624	0.06303	0.09239	0.06476
MUPLRADO	0.12725	0.04834	0.00931	0.40083	0.02707	0.01417	0.57356
MUPLTAPE	0.09894	0.21177	0.07404	0.46117	0.10717	0.04005	0.33689
PLAYRADO	0.11753	0.01665	0.02446	0.05178	0.06608	0.11855	0.69966

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TABLE 13: SUMMARY STATISTICS FOR 1982, 1985 AND 1992 FACTOR ANALYSES

1982

Factor	Factor Name	Eigenvalue	Pct. of Variance
1	Watchers	6.3	25.3
2	Attenders	1.7	7.1
3	Listeners	1.5	6.2
4	Jazzers	1.2	5.1
5	High Art	1.1	4.4

1985

Factor	Factor Name	Eigenvalue	Pct. of Variance
1	Watchers	6.9	27.8
2	Opera	2.8	8.3
3	Jazzers	1.6	6.6
4	Choosers	1.2	5.0
5	Stage	1.0	4.1

1992

Factor	Factor Name	Eigenvalue	Pct. of Variance
1	Watchers	8.0	25.3
2	Attenders	1.8	5.6
3	Readers	1.4	4.6
4	Listeners	1.4	4.5
5	Jazzers	1.2	3.9
6	Literature	1.1	3.5
7	Plays	1.0	3.2

TABLE 14: RELATIVE RANK OF ALL FACTORS

Factor Rank	1982	1985	1992
1	Watchers	Watchers	Watchers
2	Attenders	Opera	Attenders
3	Listeners	Jazzers	Readers
4	Jazzers	Choosers	Listeners
5	High Art	Stage	Jazzers
6	--	--	Literature
7	--	--	Plays

CHAPTER FIVE: CONCLUSIONS

In the introduction to this monograph, we argued that an understanding of multiple arts participation would be instructive to audience development efforts. We noted that if one seeks to expand or challenge the expectations of one's audience, then one needs an adequate understanding of what other artforms or activities the audience might appreciate, or at least find intriguing.

We also discussed how marketing the arts depends on an understanding of the reasons individuals participate generally, and the reasons behind crossover participation. Quite simply, if one seeks to sell season subscriptions, or recordings and books in a museum shop or performance space lobby, one should have some idea of who is likely to purchase tickets or enjoy recordings and books.

Our analysis of multiparticipation indicates that there are characteristics of crossover arts participants that can inform audience development and marketing efforts. These characteristics center around six main themes.

First, crossover arts participation occurs across many arts disciplines and venues. However, significant crossover is limited to groups of activities that are related in some manner. As our analysis demonstrated, there may be a few individuals who attend live ballet performances and also listen to jazz on the radio. But these activities are not significantly related because sufficient numbers of people do not participate in both. The pairs of activities where significant numbers of people do participate never have characteristics as different as ballet and jazz. Significant multiple arts participation is largely limited to activities that are similar in at least the manner in which they are consumed.

Second, typologies of multiple arts participation can be determined. Our groupings of paired activities based on correlation coefficients, clusters and factors all suggest that decisions to cross participate largely involve consideration of similarities among activities, and/or how the artforms can be enjoyed. Most typologies involve an intermixing of considerations of discipline and venue. This intermix is complicated with obvious pairings among disciplines often "upset" by considerations of venue, and vice versa.

Third, the average multiple arts participant is over 40 years old, female, college educated, earning more that 20 thousand dollars annually, white and residing in or near urban areas. This characterization of multiparticipants is so ubiquitous across all pairs of activities that one is tempted to conclude that considerations of discipline and venue are secondary to those demographic motivations that make individuals interested in the arts. But, the fact that there are some variances within pairings of arts activities means that demography is not completely causal, and that while there are some similarities, audiences for jazz are different than audiences for musicals.

Fourth, age creep is a real consideration for anyone thinking about the characteristics of their audience. For most of the arts activities we investigated, the average age of participants is rising. For some activities, this average age is already high and reflects the aging of current participants without the concurrent recruitment of younger participants.

Fifth, cluster analysis reveals that the strongest relationships among groupings of activities are based on very definable similarities. Clusters of large numbers of activities have only abstract similarities, while clusters of two and three activities normally are so connected that involvement in one normally means involvement in the other.

Sixth, factor analysis indicates that the primary explanatory factor in crossover participation is the ability to view the arts on television or video. This similarity in venue is responsible for at least 25 percent of variance in all three years of survey data.

What multiparticipation themes mean for the arts. Arts participation and arts multiparticipation are not activities engaged in by a majority of Americans. Only those activities that are more related to leisure such as reading are enjoyed by most people. This means that even the strongest marketing efforts, or the most creative audience development plans will not result in the majority of Americans attending or even considering attending the opera.

However, the themes listed above do suggest strategies for involving people in the arts. First, there should be some recognition by public and private arts funders that media outlets are the manner in which most people will be exposed to the arts. Arts participation through media (especially television) entails no risk to the participant, and is the only vehicle in which significant numbers of people will ever enjoy more than one type of art.

Second, the demographics of arts participants and multiparticipants seem to be static. Recruitment efforts among minorities, the young and the less affluent should continue, but if we are to believe SPPA data, the core group of participants has not changed significantly in ten years.

However, advertising efforts to inform the average American about what the arts offer have generated thousands of calls to arts organizations. Whatever the eventual outcome of these efforts, greater participation by minorities in single and multiple arts activities should be encouraged. Rates of participation among minorities is one area where demography is less static. The average multiparticipant in still white, but this likelihood is decreasing with each year.

Third, multiparticipation as measured by SPPA data is but one consideration within the larger question of why individuals participate in the arts. As we have noted elsewhere, SPPA data is the most comprehensive arts participation resource available, but it is still limited to traditional artforms and venues. The 1997 SPPA survey will soon be planned. In preparation for investigations of crossover arts participation in this fourth survey, we suggest that the meaning of arts participation be expanded to include other, less traditional ways of enjoying the arts. A more extensive understanding of how Americans engage in the arts will enable a fuller understanding of how they crossover among arts activities and venues.